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CONTENTS

ZAKAH—A TAX ON WEALTH FOR THE POOR AND THE NEEDY

Meaning of Zakah

We know that Zakah is a tax on wealth, which is to be spent for the poor and needy people. It being a tax, it is obligatory on Muslims. It benefits the Zakah-giver spiritually and the Zakah receiver, at least, materially and lays the foundation of a growing economy and a well-integrated society. Zakah being a tax on wealth, it may be paid, in most of the cases except specified, as a certain definite share in income accruing on wealth. So, though Zakah is paid in the form of money (*i.e.* money income) which is a flow, actually it is a tax on stock *i.e.* wealth. When money is hoarded, it becomes a stock, when it is spent, it takes the form of a flow, from which expenditure emanates. Thus Islam does not allow savings to be hoarded and not invested productively. If savings are not invested and kept idle, Zakah would consume a substantial part of savings within a certain period of time. Either the person concerned should utilize these savings for investment by himself or give to others for investment or consume it for legitimate purposes.

The word 'Zakah' means to make something grow. Personality of Zakah-giver grows and though he actually parts with money in Zakah, but due to the Grace and Munificence of Allah, he gets money manifold and thus in earning this money, he becomes responsible for a substantial increase in production which benefits the society also. Giving of Zakah enables him to view wealth, money and the worldly things of life in their proper perspective, rather than carried away by them. That is why it is said in Holy Quran: "He indeed is successful who purifies himself". (87 : 14) "He is indeed successful who causes it to grow and he indeed fails who buries it". (91 : 9-10). "And in their wealth is the right of him who asks, and him who is needy". (51 : 19). Prophet Mohammad (Peace be upon him) rightly admonished that "A town in which a man sleeps hungry and wakes up in the morning hungry, loses the promise of protection and safety from God."

Assessment and Rates of Zakah

If wealth is in possession of the owner for one year, then the owner has to pay Zakah, provided wealth crosses an exemption limit (Nisab). Different types of wealth have got different exemption limits. On certain types of wealth, the exemption limits have been specifically prescribed. Debt, if any, has to be deducted from the value of total wealth before counting the assessible value of Zakah.

After deducting debt and the money value of the exemption limit on the different items of wealth, the owner has to pay Zakah at the following rates:

(1) *Gold and Silver.*—On $7\frac{1}{2}$ tolas and above of the gold and $52\frac{1}{2}$ tolas and above of silver, 1/40th *i.e.* $2\frac{1}{2}$ per cent of each of them is to be paid as Zakah. In assessing Zakah on ornaments of gold and silver, the metal content has to be taken into account as the base.

(2) *Animals.*—Zakah rates vary from the minimum of 1 per cent to the maximum of $2\frac{1}{2}$ per cent. Zakah will be levied on the number of animals which are there for one year if the number of animals is capable of increasing with the lapse of time.

(3) *Agriculture Produce.*—Zakah rate varies between 5 per cent to 10 per cent depending respectively on the fact that whether the land is irrigated or unirrigated.

(4) *Mines and Treasure-Trove.*—20 per cent of the value of mines and the treasure-trove have to be paid as Zakah by the owners.

(5) *Commercial Goods.*—The respective owner has to pay the $2\frac{1}{2}$ per cent of the total value of the commercial or the industrial goods (as the case may be) as Zakah.

Distribution of Zakah Revenue

Holy Quran has mentioned the heads of expenditure on which Zakah revenue must be spent. Zakah revenue has to be spent by the Government through Baitul-Mal or by the Government directly or by the Baitul-Mal directly on the eight broad classes of people that have been clearly specified in the Holy Quran. This is very necessary, because the modern Governments in so many countries, spend a very tiny percentage of their tax revenue (other than Zakah as it refers to non-Muslim countries also) for the welfare of the poor and the needy people and for the development of the economy, and the substantial part of it is wasted in the consumption expenditures of the Government. Thus the productive resources of the people are wasted through the consumption expenditures of the State. So very high rates of taxes slacken economic growth. This is the surest way of squandering national resources and not allowing the people to improve their standard of living, in the name of Government planning and socialism.

So, in the Holy Quran, it is stated:

"Zakah are only for the poor and the needy, and those employed to administer it and those whose hearts are made to incline (to truth) and (to free) the slaves and those in debt, and in the way of God and for the way farer..........an ordinance from God". (9 : 60).

Let us try to understand these different categories of people among whom Zakah revenue is to be distributed, according to Holy Quran:

(1) *Poor People.*—Among the poor people, along with the poor ones, the unemployed people also could be included, because they have no source of livelihood and therefore they will become poorer and poorer as time elapses which would be contrary to the aims and objectives of Islam.

(2) *Needy People.*—Among the needy people, all helpless people and therefore all needy people like old people, sick and diseased persons, blind and other invalid persons and persons rendered incapacitated in war *i.e.* all those who are bodily helpless and who cannot earn livelihood for themselves and for their families, must be included.

(3) *The Collectors of Zakah.*—In order that the poor and the needy may be benefitted, Zakah has to be collected from Zakah givers, then stored, accounts kept and the distributed among the *eight* classes of people as enumerated in the Holy Quran. Therefore all those who are engaged in this entire collecting, storing, account-keeping and distributive machinery, should be paid their remuneration for their work, from the Zakah funds collected. Though the employees of different gradations in accordance with the nature and efficiency of their work would be paid differently and also irrespective of their earnings in other fields of work, the total expenditure to run this whole machinery of Zakah Funds should not exceed a certain reasonable percentage of total Zakah fund. Because, though a reasonable percentage of amount to be spent for the running of this machinery may be necessary to keep up efficiency, it crossing a certain maximum limit, may defeat its own purpose. The more the amount of money from the Zakah fund is used for the upkeep of this machinery, the less the money becomes available to the poor and needy people. So, extreme care should be taken that a substantial portion of Zakah revenue is not eaten up in this way and the means do not swallow the ends. We can reasonably expect that it does not exceed, say, 5 per cent of the total Zakah Funds.

(4) *New Converts to Islam and Those who are Inclined to Islam or Sympathetic towards Muslims.*—People who are recently converted to Islam, many times, have to undergo harassment and face tyranny or some people who are inclined towards acceptance of Islam, cannot freely do so for fear of oppression. All such people deserve help from the Zakah Fund so that their difficulties do not become unbearable and in desperation, they do not move away from Truth. Funds from Zakah Fund should be earmarked to help such very deserving people who have been sacrificing for the sake of Truth.

Also payment or expenditure from the Zakah should be made for those people whose friendship can be won over for Muslims by showing magnanimity.

(5) *Freeing of Slaves.*—In the days of Prophet Mohammad (Peace be on him), slavery was a great problem in many parts of the world. Seeing to the circumstances in those days, it was not possible to abolish slavery all at a time, because then they would not have found immediately the alternative source of livelihood. So, Islam laid the foundation and a strategy for the eventual and complete abolition of slavery and in the meantime, they were to be treated like brothers and like one's own family members. One of the important facets of this strategy was the freeing of slaves by the payment of money. Use of money for freeing the slaves was declared to be great charity. Money from Zakah revenue were to be earmarked to buy the freedom for the slaves. This can be done in either of the two way—either the money is given to the slave to enable him to buy his own freedom or with the help of this money, the slave is purchased from the owner and then set free.

In the modern age, this money may be utilized for national independence of a country from the foreign rule, and for the establishment of freedom within the country and helping the very poor people in becoming economically strong, shirking their helplessness and thus growing independent.

(6) *Debtor.*—All those persons—mainly poor, but even rich persons also, who are in debt which was not incurred on account of gambling, drinking wine, extravagent indulgence in luxuries etc. but honestly incurred for either satisfying the prime necessities of life or in helping other people or for productive purposes and who, at present, have no capacity in terms of wealth or otherwise, to repay debt, are to be helped from the Zakah Fund so that they are enabled to continue their work as the productive members of the society.

(7) *In the Cause of Allah.*—All those people who are struggling and sincerely endeavouring to understand, propagate and defend the cause of Allah which is honest service to Islam, and Mankind, by way of study, education, Holy war (in defence) or devotion, should be helped from the Zakah Fund. 'The cause of Allah' has got a very wide connotation which is to be understood in the context of the given circumstances and the conscious intentions of the persons who are struggling (doing Jehad) in the cause of Allah.

(8) *The Wayfarers.*—Persons who on journey away from home, not for any unlawful purpose, are wayfarers. This Category may include rich people also, but their riches at home are of no avail to them, as they are away from home and on account of some reason or the other, they are rendered helpless and without means in the journey. Poor persons on journey who are destitute on the way and poor at home, are surely the wayfarers and are to be helped from Zakah revenue. Those poor persons, not when away from home, but even at the start of their journey from home, may be helped from Zakah Fund if the journey is definitely necessary for a good personal or social cause and they have no means to undertake the journey. Mohajireens, Refugees or Emigrants who have been forced to leave their homeland or country or region of their adoption on account of religious, communal, political, racial, or social persecution or on account of war or riot, they may be included in the category of wayfarers and accordingly helped from the Zakah Fund.

Help can be direct financial help or indirectly it can be in the from of provision of waiting rooms and resting houses with all the necessary facilities and construction of wells, water houses, roads, bridges etc.

Here two important problems need clarification before a serious effort is made to adopt the Zakah system universally and more systematically:

(1) One is the discovery of the common element as the base on which Zakah is actually prescribed in the abovementioned *five* categories so that the other hundreds of new items of wealth that have sprung up in the modern economy can be assessed for Zakah without any difficulty and without any undue controversy.

(2) The second is whether the *eight* categories of the people mentioned in the Holy Quran are flexible enough to admit the non-Muslims of the same country and the Muslims in other countries and whether public enterprises should pay Zakah or not.

Let us take the first one first.

(i) *The common Base for Prescription of Zakah:*

As for example, take the case of Zakah on agricultural produce. Agricultural produce not wealth and Zakah in general has been announced by many interpreters as tax on wealth and so this apparent inconsistency has to be explained. There is no inconsistency if it is taken as Zakah on land, which is wealth and this Zakah on land is charged on agricultural produce. It always happens that the source of income is wealth. So Zakah is a tax on wealth which is land here and which gives rise to income in the form of agricultural produce and hence Zakah is collected in the form of a certain definite portion

of the agricultural produce which grows on land that is wealth. In the days of Prophet Mohammad (Peace be on him), when money economy was not much developed, it was easier, to pay Zakah in kind. But in the modern money economy, keeping the rate of Zakah the same *i.e.* 5 per cent or 10 per cent (as the case may be) of the total agricultural produce, Zakah of the equivalent value can be paid in terms of that much money. The real rates of Zakah remain the same, only its form is changed which is convenient to the Zakah-payer, the government or the Baitul-Maal and the beneficiaries of Zakah. But, then, this shows that though the tax is actually levied on wealth, it is paid from income which is from the product of productive wealth (here, land). Thus it may be said that even income-tax in the modern economy is a tax on wealth. Actually Zakah is a tax on wealth which is paid in the form of a certain definite part of income. If a person gets more income, then his wealth (including his own personal capacity) must be of higher value and so the total amount of Zakah that he would pay would be higher, though the rates my remain the same.

Model for Zakah based on Holy Quran and Sunnah

So, for the modern economy, in the light of the arguments advanced so far, we can propose to have a 2½ per cent tax imposed on income (above a certain exemption limit) which may be actually a tax on wealth-non-human and human. It is to be calculated as a certain definite part of income and is to be collected from income, but its base would be actually wealth *i.e.* machines, tools, goods, raw materials, human capacity of various types etc., which are engaged in production or have got the potentiality to do so (barring certain necessary exceptions). Of course, the exemption limits (Nisab) and the rates of Zakah that were prescribed for 5 categories of things by Prophet Mohammad (Peace be on him) and the early caliphs, which were described earlier in this paper, (they) have to be kept intact so that they always serve as a concrete example and a model for methods and the spirit to be followed in evolving the exemption limits and rate or rates of Zakah for other innumerable types of wealth and goods that have sprung up and are constantly sprouting forth in the modern economy. Unnecessary controversy also can be avoided in this way. Hence it is suggested here as a proposition to be taken up for further discussion that barring the previously mentioned 5 categories of things, Zakah on wealth in the form of income tax at the rate of 2½ per cent on income may be charged and the revenue collected may be earmarked for spending for the heads of expenditure clearly mentioned in the Holy Quran. But the categories (*i.e.* the heads of expenditure) mentioned in the Holy Quran are of a broader nature and there is enough elasticity and flexibility in them so as to provide ample scope for healthy and realistic interpretation which is not unmindful of the present day conditions of the Muslims as well as the non-Muslims. After taking into account the immense usefulness of the institution of Zakah and the methods to be followed in the assessment of Zakah, some people may hold

an objection on the ground that expenditure out of Zakah revenue for the poor and needy people may result into sloth and idleness on the part of these beneficiaries and may also create a disincentive effect on the other people of the society. But this is entirely a wrong objection. Prophet Mohammed (Peace be on him) always adopted an approach of helping other people to help themselves. He did not believe in the dole-system, so to say. He helped poor people in purchase of tools of production or learning techniques of production so that they may be enabled to earn their living by themselves. He always emphasized the dignity of labour and discouraged begging. Of course, very old and incapacitated people, orphans, widows, sick people and others who could not work, were to be supported from Zakah funds directly. Islam has got the wonderful capacity of securing the healthy integration of honest work, distributive justice and direct help to the needy and helpness people.

Now the four important questions pertaining to Zakah remain to be answered :

(i) The first is regarding the help to be rendered from Zakah Fund by one Government to another Government ; or by the people and organisations of one country to the people of another country.

(ii) Second is whether non-Muslims of similar needs could be helped from Zakah Fund to which only Muslims have contributed.

(iii) Whether public enterprises should pay Zakat on their wealth (to be charged on income) or not.

(iv) Whether the Zakah Fund is enough to guarantee the minimum necessary standard of living to people, who are below that level or other additional taxes besides Zakah are to be imposed together sufficient tax revenue so as to enable the Government to provide or ensure such a minimum standard of living to the people.

Let us discuss the first question first and then the others in sequence :

(1) *Help from Zakah Fund of one Government to Another Government.*— It is true that in this case, Zakah is collected from the Muslims of one country and is be given to Muslims of another country whose rich Muslims have not contributed at least towards the financial aid that is given by the first country. So unless the minimum necessary standard of living is guaranteed in practice to all the people in the first country, financial aid from the Zakah Fund of this first country perhaps cannot be given to the poor and the needy people of another country. But if after satisfying the minimum needs of its own people if there are surplus funds available, then this surplus can be utilised to help the people in another country. This can be perhaps taken as the basic principle and it can be very well applied at all levels

(2) *Aid to non-Muslims.*—Some points are worth noting in this direction. The *8* categories of people that have been mentioned in the Holy Quran for distribution from Zakah Fund, have been described in the general terms without specification that they all are to be Muslims. *Secondly,* though Zakah revenue is collected from Muslims, it is collected by the State and the State has also got duties to perform towards non-Muslims as towards Muslims. *Thirdly,* Caliph Omar provided financial aid and other types of aid to the non-Muslims also from the Zakah Fund. *Fourthly,* Islam teaches serving all people irrespective of creed, colour, race or community. The sun and moon of God shine for all people and Islam also shines for all people. If a non-Muslim is starving or incapacitated due to illness, accident or old age, it cannot behove Muslims pulsating with the humanistic spirit of Islam, not to help the helpless non-Muslims. Zakah is given by Muslims for winning the pleasure of God and will God not be pleased when a needy or poor non-Muslim is helped through this Zakah revenue? The crown glory of the impartial humanism of Islam is that the Islamic Government from its Zakah Fund, will help the needy non-Muslims of its own country first before helping the needy Muslims of another country.

(3) *The purpose for the imposition of Zakah is threefold:*

(i) to purify the soul of a Zakah-giver,

(ii) to help the poor and needy people, and

(iii) to discourage hoarding and encourage investment so that there is more production and employment in the economy and poverty is lessened through production also, along with the channel of distribution.

Now in public enterprises, there is not private ownership and everybody working in a public enterprise, would be an employee. If Zakah is paid on the profits of public enterprises, actually no body serving in the public enterprises will be paying from his own pocket. Public enterprise is a corporate body and not an individual. So, the first purpose of the purification of the individual soul will be hardly served. If there is less profit or actual loss on certain public enterprises, then in case of Zakah payment, the amount of Zakah would be less or nil and inefficiency or corruption of the employees of the public enterprises would be blamed for depriving the poor and the needy people from benefiting through that much Zakah revenue which is actually lost. So, in order to escape from the displeasure of God on this score, they would work more efficiently and more sincerely

so that their enterprise gets more profit-income and they, as a unit, may be enabled to pay more Zakah. So, it appears that public enterprises like private enterprises, should pay Zakah.

Second reason is that in certain socialist countries where resources from private hands have been taken away from them and brought into public sectors, commodities of general consumption for masses are not produced in sufficient quantities and people are put to extreme hardships. Public enterprises are also run inefficiently. Thus people are deprived of a decent minimum standard of living. As in socialist countries, most of the enterprises would be in the public sector and hence if Zakah is not paid on wealth in the public sector through tax on income, the poor and needy people would be deprived of their legitimate share, which. God has ordained.

So, we conclude that public enterprises also should pay Zakah.

(4) *Question of the Sufficiency of the Zakah revenue for the social security and other Government expenditure.*—On account of industrialization, growth in trade, development of urban areas, development of technology, mounting defence expenditure, increase in population etc., the expenditure of the Government has been enormously increased. Centralized planning is another very important factor contributing to huge Government expenditure. But even if centralized planning is removed, still however, on account of defence and other reasons, government expenditures would be still enormous. However, even when defence expenditure is reduced by better neighbourly relations, still the Government may be pressed for arranging wide-ranging social security system and provide other facilities of the general type like road building, basic transport and communication facilities, development of ports, development of educational institutions etc. also, which may necessitate substantial tax revenue if deficit financing is to be avoided.

It is better to introduce additional taxation besides Zakah, instead of introducing high rates of Zakah on numerous items that are not specified in Shariah. This is also because all people belonging to different religions and communities would benefit from the national-social security system and they all will have to contribute to meet with this huge expenditure. However, one point of major importance should be noted that too many taxes at progressive rates, should not be imposed. *Islam has not prescribed many taxes and has succeeded with limited taxes and with almost proportional rates of taxation at a low level in improving the lot of the people, historically speaking.* In the present-day economies, most of the finance acquired through tax revenue is more wasted than utilised for development or for helping

the poor and needy people: In countries where tax-rates are reduced, there is more production and less unemployment. Taxes beyond a certain limit are not tolerated by the people and the Government easily slips into the temptation of resorting to deficit financing: so, as a result, inflation many times, comes into being and in the situation of inflation, taxes also become inflationary rather than anti-inflationary, as increase in taxation as an anti-inflationary measure, is not made to result into surplus budgets, and actually deficit budgets are allowed a mounting spree.

Too much increase in public expenditure without the help of substantial income from natural resources (like oil etc.), means that freedom of the people to spend money is to be reduced and the tyranny of the big government is to be accepted. So, even very good schemes, but requiring too much government expenditure and taxation at higher rates ultimately harm the people more rather than benefit them. These taxes also are without religious injunction and their net is found to be wider and the rates too high. They are impractical and against human nature.

NATURE OF A DEVELOPMENT ECONOMY

Aim of economic development is to increase *per capita* real income of the masses. Increase in production requires enhancement of productive capacity *i.e.* increase in the quantum of capital per man, 'capital' to be understood in a very broad sense of the term. Capital may include education as invesment in man, development of the money and capital markets, development of the transport and the communication systems, establishment of law and order etc. Anything that is created by Man and used for production of consumer goods or other capital goods is capital. So economic development is augmenting capital per person. Production of capital goods i.e. the means of production require savings and thus investment is limited by savings.

Islam and Interest-Free Banking

Savings are current savings, past savings and foreign savings made available to the relevant country. Savings are resources for productive investment. Functional Profit can be a dynamic principle in a free economy with price stability while interest is a principle of Stagnation from the point of view of saving and productive investment. So Islam does not oppose profit that is functional to production and investment and which is shared with workers and consumers by the adoption of the schemes of profit sharing and lower prices of commodities and oppose interest which is retrogressive and destabilizing. So Islam advocates interest-free economy, which may necessitate profit sharing-banking. It is likely to be highly conducive to economic development with stability. All countries and developing countries in particular, require interest-free, profit sharing banking to ensure rapid economic development with stability.

Institution of Interest-Destabilizing and Inhuman

The institution of Interest is harmful not only to the payers and the payees of interest, but also to the wider economy and the people at large. Interest along with other forces, can become one of the causes for inflation and also for recession and unemployment.

Secondly, many time, the rejection of the Institution of Interest is based on the argument that Interest is a fixed payment on money borrowed by a firm irrespective of whether profit is acquired or loss is incurred by the firm. It is proposed to suggest a more sound argument of repetitive payment-character of Interest in place of the fixity of Interest payment-argument, as even wages and rent also are fixed payments to be paid irrespective of profit or losses incurred by the firm Here if it is argued that wage-earners offer labour-power which is productive of output and natural resources provide their services which are functionally required for output, borrowed money represents real savings of the lenders which are inputs for creation of capital goods or means of production which are productive of output. So interest is not reward on money, but on money saving which represents real saving of goods. So many saving has to be rewarded, of course, not

in the form of Interest, because saving is given once, but interest as a price of saving is paid many times every year the principal amount cannot be repaid in time. Price of every commodity is paid only once, but Interest, as a price of saving, has to be given to the lender frequently though saving might have been use only once. This repetitive character of Interest payment is not functional and hence it is exploitative and it harms and burdens the entire economy. Hence the Institution of Interest should be rejected and the principle of profit-sharing as a reward of saving should be adopted in its place.

But profit-sharing in place of interest-bearing does not require rejection of saving as a factor of production which has to be rewarded through profit-sharing, and so the providers of saving cannot be asked to share the loss or bear the entire loss, as wage earners or land-owners are not asked to share or bear the loss. By taking this approach, the conflict between Islamic Economics and the general Economics is removed and Islamic Economic is put on a surer foundation in science and Shariat. This helps us very much, from the point of view of Islamic Economics in Judging the mertis and demerits of the prevalent three models of interest-free banking and also the fourth and fifth models of interest-free banking that have been developed here.

Interest-Free Banking Models

In this paper, it is proposed to examine these five models of interest-free banking. Broadly their main features are as follows:

(1) *The First Model of Interest-Free Banking*:—Borrower of money-capital from the bank shares profit in his business with the bank while the loss incurred by the borrower to the extent of the borrower money capital has to be entirely borne by the bank and not the borrower. At present this is the most popular-model and is based on the Madarabah principle. (Siddiqui, 1969).

(2) *The Second Model of Interest-Free Banking*:—According to this model, not only profit of the business enterprise is to be shared with the bank, but the loss also is to be shared between the bank and the business enterprise. This model is based on the Shirkah principle. (Siddiqui, 1948).

(3) *The Third Model Interest Free-Banking*.—The Third Model is a radical one in which the credi creating power or the banks is to be done away with by introducing the 100 per cent reserve system and the importance of the non-banking financial intermediates and the role of the Central Bank have to be increased considerably. Replacement of interest bearing by profit-sharing principle is not the be all and end all of interest-free banking and Islamics, other more radical measures are required along with it if real Islamic Economy is to usher forth. (Chapro, 1978).

(4) *The Fourth Modal of Interest-Free Banking*.—This model that I have been trying to develop, requires that the profit of the business-enterprise to the extent of borrowed money capital, is to be shared with the bank according to

the terms in the contract, but the loss of the business enterprise is to be entirely borne by the borrower. This is because the loss in business enterprise is due to wrong decision-making of the enterpreneur of the business enterprise and the bank had no role in this decision-making process of the business-enterprise. Therefore the loss of the business-enterprise has to be entirely borne by the business enterprise. But profit of the business-enterprise is to be shared with the bank, because money saving provided by the bank to the business enterprise is an input and is a factor of production and hence it has to be rewarded which is done here by profit-sharing. If there is zero profit or if there is loss, the bank does not get anything so that the business enterprise does not break down under the weight of dead debt and accumulating interest. This is a practical model which is quite consistent with human nature and the modern science of Economics and is in consonance with the Shariat of Islam.

Fifth Model of Interest-Free Banking based on the Principle of State-Lending in Place of State-Spending.

In this model, the Central Bank of the country may provide reserve money without interest to the banks to whatever extent that the banks demand and either the banks take service charges at a low fixed percentage rate from the borrowers irrespective of their profits or losses or alternatively the banks share in the profits on borrowed money and in case of losses, losses are to be borne fully by the borrowers only as in the model. Also except one indirect tax like 'withdrawal' tax' (on the pattern of a general sales tax in order to withdraw surplus purchasing power for the maintenance of general price stability) and one direct tax like "the social share tax" (the spending of the revenue of which may be managed by the non-Government body of social workers for the specific purposes of helping the needy people on the pattern of Zakat), all other direct and indirect taxes may be abolished to encourage production saving and invesment and stave off inflation. Profit-sharing by the management with the workers also may be introduced.

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SOME ASPECTS OF ISLAMIC LIFE—THE GHANAIAN EXPERIENCE

More than one thousand three hundred years ago, our Holy Prophet exclaimed the message of Islam in the Arabian City of Mecca. That was a long time ago, but since this period the message of Islam has been echoed re-echoed and extended to all corners of the earth. Today, about one-fourth of the human race professes and practices Islam.

ıslam which connotes peace and submission to the will of God is not an ideology or a mere religion. To put it tersely, it is a way of life. It embraces all facets of human activity. It is a socio-religious phenomenon. As Muhammed Qutb said in his book, Islam The Most Misunderstood Religion, "Islam is a practical system of life that fully appreciates all the genuine needs of mankind and tries to realize them. In trying to meet the genuine requirements of man, Islam effects a perfect balance so far as the limitations of human nature allow".

In this paper we shall address ourselves to that aspect of Islam that deals with our social life. The approach will be to take one or two aspects of our social activities and try to relate these to the message and ideals of the Holy Quran *and our Holy Prophet.*

First of all, we consider education and pursuit of knowledge. It is our firm belief that education is the basis of the survival and growth of any society, no matter what the belief or believes of that society may be. It does not even matter whether the society is capitalistic, communistic or communalistic. Education is necessary to all types of society and at all times. In our present age and indeed in all ages, the success of any society is reflected in the level of enlightenment and what the Americans call "know-how" of it's people. And enlightenment and know-how cannot germinate on the soil of ignorance or in an environment of apathy. It may be true to suggest that any society that neglects the education of its people is a society that is inviting humiliation and possible destruction. This is our reason for choosing education.

What is the attitude of Islam to education? We shall attempt to answer this question, by examining what our Holy Prophet and other leading moslems said on the subject. The Holy Prophet on many occassions in his sermons stressed the value of knowledge. We will give few examples of these sayings. "To seek knowledge is obligatory on every Muslim male or female"; "He who leaves home in search of knowledge walks in the path of God"; "There shall be no envy but two: The person whom Allah has given wealth and the power to spend it in the service of truth and the person whom Allah has granted knowledge of things and he judges by it and teaches it to others". "There are three

sons for whom there is a double reward....the person who has a slave girl he brings her up the best education then sets her free and....he has a ble reward". Very often, the Holy Prophet impressed upon his disciples ., "The Sink of the scholar is made more holy than the blood of the martyr". se statements are clear as to the intention of the Prophet. What perhaps is essary to note is that education is compulsory to every Muslim. The second is that no distinction in education is permitted in respect of males or females. ed the Holy Prophet even emphasized the education of slave girls.

In a very penetrating eulogy of knowledge, the Holy Prophet is reported to said: "Acquire knowledge, because he who acquires it in the way of the d performs an act of piety; who speaks of it, praises the Lord; who seeks dores God; who dispenses instruction in it, bestows alms; and who imports it ts fitting objects, performs an act of devotion to God. Knowledge enables possessor to distinguish what is forbidden from what is not; it lights the way Heaven; it is our friend in the desert, our society in solitude, one companion n bereft of friends, it guides us to happiness; it sustains us in misery; our ornament in the company of friends; it serves as an armour against enemies". [2] This statement distinguishes our Holy Prophet as one of greatest exponent of education.

The Holy Quran also is not silent on the subject of knowledge. A number verses in this Great Book is addressed to the question of knowledge and cation. Man is advised to pray for knowledge. Indeed the first revelation he Holy Prophet was in these words: "Read in the name of thy Lord who ted; He created man from a clot, Read and thy is the most Honourable, taught to write with the pen, taught man what he knew not". (Holy oran XCVII—3—5).

This command which was revealed to the Holy Prophet is also an injunction all mankind to read and to learn. It is possible to look upon this injunction he first declaration in favour of mass-education.

It is sometimes argued by some section of the leaders of Islamic thought when the Prophet spoke of education or knowledge, he meant theological lies and therefore he was referring exclusively to the study of the Holy Quoran, Hadiths and allied subjects. It appears to me, that this interpretation does e or no justice to the wisdom of the Prophet. It is on record, that the Holy phet had stated that muslims should seek knowledge even if it were e in China. Surely, the Holy Prophet did not mean by this statement that slims should go as far as China for the purposes of learning about the Holy oran and Hadiths. It is in order to infer that the Holy Prophet when he ed about education, he was referring to all types of knowledge. This idea urther emphasized by the statement of Hazrat Ali, one of the eminent disles of the Prophet who said, "Eminence in Science is the highest of ours".

Al-Ghazzali, one of the greatest theologian and thinkers produced in Islam, wrote: "Ever since I was under twenty (now I am over fifty)....no philosoper did I come across without desiring to learn the essence of his philosophy; no dialectical theologian, without striving to ascertain the object of his dialectics and theology; no Sufi, without coveting to probe the secret of his sufism; no atheist without grouping for the reasons for his atheism. Such has been the unquenchable thirst of my soul for investigation from early youth......" [3]

This declaration of curiosity, search and research for truth and knowledge is not a special case, it is the spirit that imbued the early Muslims. Indeed it summaries the sprit of Islam in the search of knowledge with no distinction whatsoever. It was this spirit and passionate devotion to education that inspired the early Muslims to build and establish academies and universities in Bagdad, Salerno, Cairo and Cordova. This spirit has been aptly described by Ameer Ali in his classic book, The Spirit of Islam, in these words: "Each great nation of the world had its golden age. Athen had her Periclean era; Rome, her Augustan age; so, too had the Islamic world its epoch of glory; and we may with justice look upon the period which elapsed from the accession of Mansur to the death of Mutazid-billah, with only a brief intermission during the reign of Mutawakkil, as an epoch of equal, if not of superior greatness and magnificance. Under the first six Abbasided Caliphs, but especially under Mamum, the Muslim formed the vanguard of civilization....The Sarecenic race by its elastic genuius as well as by its central position....was pre-eminently fitted to become the teacher of mankind. Under the inspiring influences of the great Prophet, who gave them a code and a nationality...., the Saracens caught up the lessons of wisdom from the East and the West, combined them with the teachings of the Master and started "from soldiers into Scholars". [4]

It has been suggested and with much justification that the intellectual ferment and scholarship established by the early Muslims in the medieval age played a no mean role in the development of modern scientific and technological heritage of Europe and the Americas. One writer puts it in this way—"The origins of some of the basic features of modern civilization, its scientific advancement, its freedom from the bondage of ecclessiastical authority, its socio-political values like liberty, equality, and fraternity, are all traceable to Islamic sources to the Quoran and the practices of Muslim society". [5]

It is clear that Islam stands for the promotion of knowledge. It is also clear that the early muslims made outstanding contribution in the field of education. In brief, the attitude of Islam to the pursuit of all types of knowledge is positive and practical. Against this background, the attitude and the position of the muslim society of Ghana in respect to education presents a depressing picture. In the field of liberal education, the achievement of the muslim society is very insignificant.

A number of reasons explains this state of affairs. We shall try here to enumerate few. The first and perhaps the most important of these reasons is the fear of muslim parents that their children would be christianized, if they sent them to the Westernized schools in the country. There is an element of truth in this fear because the early Westernized schools established in the country were christian missionary schools with the expressed aim of proselytization. It is therefore not surprising to see the illiterate muslim parent confusing the type of education giving by these schools as an education to become a christian. Indeed, there are cases of muslims who as a result of attending these schools have been converted to christianity. To a large extent the position has now changed with the introduction of secular schools by the government and the progressive liberalization of policy by the missionary schools. But the fear of the muslim parents still lingers. This fear is sustained by the unguarded statements of some of the less educated "learned" men or mallams of the muslim society. These Mallams peddle the view that secular education is all wrong and against the teachings of Islam. They looked upon muslims with Westernized education with much suspicion and sometimes consider them as nothing more than unbelievers and heretics. This attitude stems either out of ignorance or self-interest. They realize that the more muslims obtain secular or Westernized education, the more independent in judgement they would become and therefore less amenable to accept directions and injunctions from them. Therefore it should be opposed.

The second reason is the low level of education provided by the Quoranic schools in Ghana. These Quoranic schools had their origin in the medieval mosques schools provided in Islamic countries, where one could obtain free of charge explanation and commentaries of the Quoran, Hadiths and Shariat.

It may be relevant at this stage to describe briefly the nature and structure of Quoranic schools in Ghana. The Quoranic schools are usually established by a Mallam and in many cases he is the only tutor in the school. It is a one man business. Often the school is attached to a Mosque. The number of pupils may vary from ten to hundred. The duration of the course ranges between five to ten years. Fees are charged which are usually collected on weekly or monthly basis. This is the stipend of the Mallam. The schools are normally co-educational.

The subjects studied consist largely of writing and reading. First the pupil is taught how to write the Arabic alphabet and at the second stage he is taught reading of the Holy Quoran which is done by rote and this takes much of the time of the pupil in the school. The pupil uses a slate on which he copies the verses of the Holy Quoran for his studies. When he learns to recite a paragraph or a chapter of the Holy Quoran, and the Mallam is satisfied with his rendition, he is allowed to clean that one and copy the next paragraph or chapter on the

slate. The pupil does so until he completes the whole one hundred and fourteen chapters of the Holy Quoran. After this, the pupil is considered to have completed his studies.

If the Mallam is enterprising, in addition to the reading the Holy Quoran, he may also teach his pupils some elementary sentences of Arabic and elements of Islamic worship. After this education, most muslim pupils are contented that they have performed their responsibilities as muslims.

The most enterprising and ambitious of these pupils may wish to continue their studies. Since there are no organized higher institutions of Islamic studies, such students often attach themselves to renowned Mallams, who become their tutors. This takes the form of an extramural studies. The Mallam offers lessons not at specific period but at specified convenient hours to him. In certain cases the student stays with the Mallam and works for him as a payment for his teachings. The teaching usually takes the form of an exposition whereby the Mallam explains the meaning of particular religious text books to the student. The popular texts or books on the Hadiths, commentary on the Quoran, texts of Islamic worship, and Arabic grammar. The books usually recommended are old Classical works on the subjects—some written about one thousand years ago. Very few Mallams teach modern works on Islam. After studying for some few years, the student qualifies as a Mallam or a religious teacher.

It is evident that The Quoranic schools, as now organised in Ghana, fails to meet the requirements of today. The training provided is narrowly theological and even in this field the pupil does not get adequate training. He learns only how to read the Holy Quoran without any notion of its meaning. The Arabic language the pupil learns is negligible. Broadly speaking, the pupil is not sufficiently equipped with the necessary tools to stand the needs of the country.

The result of this low level training is that the student, after completing his studies, finds with shock that he is unfit to contribute his full quota to the development of the country. He realizes with dismay, that notwithstanding his Quoranic training, he has to take the lowest rung in the ladder of employment. Often, he even finds it difficult to get employment and consequently he is forced either to start all over again to study some trade or go to a night school or join the school of the unemployed. The frustration arising from this situation ends sometimes in a large number of muslim children going astray and becoming social undesirables—a liability to Islam and to the country. This is the crisis—a serious crisis facing muslim society in Ghana today.

Perhaps at this stage one or two suggestions on how to get around these problems which face the Ghanaian muslim society and very likely some other muslim societies in comparable stage of development may be useful. In this

connection we suggest that leaders, particularly of Islamic thought in Ghana and in any other country in a similar situation must take steps to combat the erroneous view that Westernized schooling perse is against the teachings of Islam. The clear distinction that exists between a Westernized school which is geared towards providing secular education and a missionary school which aims at prosetylization of the pupils should be brought home to muslim parents.

In practical terms, muslim parents should be encouraged by all means available to muslim leaders to send their children and wards to the Westernized schools. If these schools are not available in areas with concentrated muslim population, pressure should be brought to bear on the authorities to establish such schools. Secondly in order to allay the fears of muslim parents such schools should be manned as much as it is practicable by muslim trained teachers. Islamic studies should also be introduced in these schools. For example Accra, the capital of Ghana has more than fifty Quranic schools, with the average students today of about hundred. These 'mushroom' schools can be merged so as to produce some few effective institutions that could provide ample and comprehensive education to the muslim pupil. It must be noted however, in fairness to some few good muslim educationists who in recent years have taken the right step in establishing schools where Arabic as well as English studies are offered. These efforts are however few grains in the desert and provide for only elementary sort of education. As a long term plan, muslim leaders and educationists in Ghana should not limit their horizon to the provision of elementary education but also begin to consider and plan for the establishment of secondary, teacher training, as well as technical institutions for muslim students. All these steps which are necessary to correct the educational imbalance which is not in favour of the muslim can only be attained when there is unity of purpose among the muslim populace.

This brings us to another aspect of the maliase that corrodes the Islamic Life of Ghanaians, *i.e.*, the devisiveness and lack of unity among muslims, mallams or mulahs. Recent events have highlighted a disturbing cleavage among muslims not only along doctrinal lines but also along tribal and ethnic lines. As a result of these differences, muslim are unable to present on any subject that affects their welfare a common front. Such differences provide fertile grounds for non-muslims to cash in to the disadvantage of muslim and Islam in Ghana. One can hardly over-emphasised the seriousness of these differences to the health and growth of Islam in Ghana. Perhaps the international Muslim Community owes it as a duty to Islam to revert its attention to such situations as prevail in Ghana and provide a helping hand in finding solution to the Ghanaian muslim problem.

One of the distinguishing features of Islam is its emphasis on the brotherhood of man and the unity of the faithful. In Islam, all men are creatures of God and are all equal before God. The religion does not accept distinction based

on kinship, tribe, colour, race or nation. This revolutionary concept is the gift of Islam to civilization. Islam for all time, banishes the false notion of tribal or racial superiority. The declaration of oneness of humanity is enshrined in the Holy Quoran in these words: "O mankind". We created you from a single (pair) of a male and a female, And made you into.

Nations and tribes, that
Ye may know each other
(not that ye may despise
each other). Verily
The most honoured of you
in the sight of God
Is (he who is) the most
Righteous of you" (Holy Quoran XLIX: 13).

The Holy Prophet confirmed this declaration when he said: "O Lord! Lord of my life and of everything in the universe, I affirm that all human beings are brothers unto one another".

To Muslims the need for unity and brotherly spirit is emphasised with greater urgency. The Holy Quoran declares:

"And holdfast,
All together, by the Rope
Which God (streches out for you),
and be not divided
Among yourselves;
And remember with gratitude
God's favour on you;
For ye were enemies
And He joined your hearts
in love, so that by His Grace,
ye became brethren;" (Holy Quoran III: 103).

In another chapter similar declaration is made in these words: "Steadfast in Religion, and make no divisions therein "(Holy Quoran XLIII: 13).

The command in these verses is very clear. Muslims are being requested to keep together and to shun any tendency to disunity. The concept of Islamic brotherhood is stressed again and again in the Holy Quoran and by the Holy Prophet. The Holy Quoran declares, "The Believers are but a single brotherhood. So make peace and reconciliation between your two (contending) brothers". (Holy Quoran XLIX: 10).

The Holy Prophet also did not mince his words on this subject. He assures in these words. "A muslim is a brother to a muslim; he foresakes him, nor speaks to him what is false nor wrongs him. And verily one of you is a mirror to his brother; so if he sees anything hurtful in him let him point it to him with his finger".

In these statements, muslims are advised to make peace among quarrelling muslims. We are being asked to be frank with one another and no hypocrisy. We are being asked to be frank with one another and no hypocrisy. We are told to point out the mistakes of our fellow muslims but without rancour.

It may perhaps be necessary to note that this idea of Islamic brotherhood is not a mere ideological vision or jumble of words. Indeed, Islam establishes adequate scope for their practical application. Five times a day in his congrc-tional prayers, where he stands shoulder to shoulder in the service of God with all categories of human beings with no distinction, the Muslim is made conscious of his close kinship to other muslims. In the Annual pilgrimmage in Mecca, the muslim pilgrim comes into contact with all the communities of the world in their devotion to the Supreme Being and he becomes even more conscious of the Islamic brotherhood.

The tribes of Quoraish were famous for their individualism, boastfulness and contempt for other tribes. They exalted themselves on their forebears and origin. After the Conquest of Mecca, the Holy Prophet when he was addressing them in the courtyard of the Sacred Mosque said:

"O Quaraish! God has delivered you from pre-Islamic haughtiness and boasting about your forefathers. All people descended from Adam and Adam was created from dust". Later in his Farewell Pilgrimage message, the Master warned the Quoraish tribes in these words: "There is no distinction between an Arab and a non-Arab except by piety and that a muslim is the brother of the muslim".

The idea canvassed in this message cannot admit double meaning. It is very clear. It meant in Islam the idea of a chosen people has no place. Islam cannot be monopolysed by any group. The idea of distinction on the basis of trible is not permitted. The only acceptable distinction recognized in Islam is that based on deeds, virtue, competence and piety. As the Holy Quoran Summarises; "The most honoured of you in the sight of God is (he who is) the most righteous of you" (Holy Quoran XLIX: 13).

Thus looking at these declarations, it is possible to conclud that the intru-sion of such extraneous elements like tribalism, kinship, and forefathers into Islamic decision is proscribed. Abdul Rahman in his book "The External Message of Mohammed" sums up the position as follows: "Racism or a fanatic attachment to tribe, nation, colour, language or culture is rejected by the Message (of Mohammed) as a product of pre-Islamic idolatory. The Prophet

declares, "He is not of us who preaches bigotry. Islam rejects every form of bigotry. All loyalties are directed to the Word of God, and no relation above the spiritual is recognized".

In the face of these overwhelming verdict of Islam in favour of unity and equality among muslims and its denounciation of narrowness, tribal and national bigotry and any attempt at religious monopoly, the advocates tribal or ethnic monopoly of Islam stands condemned. It is particularly distressing to see Muslims for instance, supporting the appointment of imam not on the basis of competence, piety and righteousness but on the concept of tribal origin.

We should not be mis-understood as suggesting that muslims should not differ. That will be unrealistic. After all muslims are human being like everybody and are bound to differ at one time or the other. Our view however is that when we want to differ let us differ on principles but not on shadowy subjects such as tribal or abtuse doctrinal issues. For it is worth remembering, that tribalism in religion as in politics is a distuptive element with extraordinary potential of doing harm to even a good cause. Abtuse and academic doctrinal differences when unnecessary popularize set a religion out of ease.

In conclusion, we should end with this brief conversion between the Holy Prophet and his companions: Holy Prophet: "Help your brother whether he is the doer of wrong or wrong is done to him.

His Companions: O messanger of Allah! We can help a man to who wrong is done, but how could we help him when he is the doer of wrong?

Holy Prophet: Hold him back from doing wrong".

FOOT NOTES

[1]Islam : The Misunderstood Religion by Muhammad Qutb 1973.

[2]Spirit of Islam by Ameer Ali Syed p. 360.

[3]Hitti History of the Arabs pp. 431-432.

[4]Spirit of Islam By Ameer Ali Syed.

[5]Vice of Islam Vol. XVI No. 4 p. 319.

بسم الله الرحمن الرحيم

الحمد لله رب العالمين والصلاة و السلام على محمد الذى بعث رحمة للعالمين

DEAR MUSLIM BROTHERS !

I present my thanks and gratitudes to Dear President of National Hijra Centenary Celebrations Committee, to the members of Law Division. I pray success for this Conference from Allah, I give my salam an duas to everybody

IJTIHAD (DILIGENCE) AND ITS IMPORTANCE IN MODERN TIME (X)

INTRODUCTION

The commands, sent and confirmed by Holy Quran and Sunnah, Islamic basi sources, are limited not in shmoul (comprehending) but in number whereas the events, onditions and situations which took place dating from Rasoulullah's (peace be upon him) time, were en 'less and this position has been goin on in the same way at all the times and every centuries' Islam, the religion that we belong to have is a universal holy religion that can solve all the problems of humanity in all times. It's principles are the same. But it is difficult to find answer with the limited rules that come from two basic sources, for these uncountable problems an' conditions. Feelin this difficulty, the Holy Prophet (pea e be upon him) and his companions (Ashab) accepted new sources in the light an l the dire tion of these two sources and tried to solve their problems. Hadith of Mouaz b. Jabal is a clear example of this. While sending him to Yemen as a governer Rasoulullah asked him how he would govern, there, and he answered that first he woul follow Kitab Allah (The Holy Quran), if he could not find a rule in it he woul l follow Rasoulullah's sunnah, if he could not find any answer he would act ac ording to his own choice and convi tion. Rasoulullah was very happy and positive for this answer and he thanked (said shoukr) to Allah, because of such an answer (1).

Shourayh, who had been the judge of Khadrat Omar and Ali. Omar sent the following letter to Shourayh ; " Decide accordin · to Kitab Allah, if you can not find what you look for, do judge according to Sunnatu Rasoulullah, if it is insufficient you should jud,e by your own conviction (2). Under these conditions, ijtihad goes into the fourth base of Islam (as being one of the Adillah la-Arbaah) an l Islamic Law, which is Qiyas al-Fuqaha.

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THE DEFINITION AND EXPLANATION OF IJTIHAD

The wor.l of IJTIHA¯ (الاجتهاد) comes from the word of JUH¯ (جهد). In dictionary it means effort which is spent for the work that requires effort more than normal work, a position which is hard to endure, to spend the possible strength. In the law usa.e, it means a learned mujtahid's spending all his effort to take out secondary legal edicts from indications. The work of Ijtihad, as the importance of it can be understoo l from the definition, can only be made by learned mujtahids as we will see from the conditions of ijtihad later on, but not common an l any ordinary people. The work, done by those who are not learned mujtahids, can not be accepted as ijtihad. As a learned solving a problem outside the law can not be considere ijtihad, that work, in the field of law, which is done by a person who is not learned well qualified and not mujtahid, can not be considered ijtihad either (3).

As the person who can make ijtiha l and the field of ijtihad are determined in this way, those who stand on the definition pointed but that ijtihad can be made in every fiel l of law, in every place where there is legal (sharia legitimate) indication. They specifie the work from this point too. That is ; it is prohibited to make ijtihad when there are clear, expli it strong nass (hukm) (4). Everybody units over matters that are reasonable and that can be known and understood but those who are mistaken are sinful. It is known that by hadiths that one who makes an ijtihad in law about probable and presumptive matters and is accurate about it will et two rewar's (sawabs) if he fails he will get one rewar. (5). Failing is not thought as a sinful work. Shortly mujtahid has been encouraged about presumptive matters where there is not a clear indication and nass and to answer the people questions (6).

Such an ijtihad has been lassified accordinɜ to its importance. That is :

1. Ijtihad which must be observed (" al-Fardzal-A ' yn "); an ijtihad that is ne essary to be done when there is a fear of frequently occurring problems when mujtahid is asked such a question he is obliged to answer. Because the essential duty of scholar is to solve this kind of problems.

2. Ijtihad which is regard.d sufficing duty (" al-Fardaz al-Kifayah "); an ijtihad which is done when there is not a fear of frequently oc urring problem. If the person whom the question is asked more than one, in that case the duty of each is to search the necessary answer. But this work does not need a necessity.

If a person who has ability of making ijtihad, gives up and does not make an ijtihad on any s bject he is sin'ul. But if one of the mujtahids gives an answer, rests of them do not have the obligation. A mujtahid who gives up doing ijtihad without any excuse is sinful.

3. Mandoub (Approved) Ijtihad ; if the mujtahid makes an ijtihad when there is no question and no problem it is regarded man oub and mired, approved ijtihad, for this service is only for the sake of knowledge.

4. Haram (Forbidden) Ijtihad ; such an ijtihad is done when there is a clear and explicit indication. Because permission is not given for mu tahid when there is a clear legal proof. It is a general rule in Islamic Law to leave the suspicious thing and to follow the certainty (7).

The work of the scholar who could not reach to the degree of mujtahid is ; to take the learned mujtahids preference and corrections in exactly the same way. Customs and traditions in a place where there are numerous ideas and the position of people have important roles in choosing the best idea and i tihad (8). Practice with knowledge comes everytime first than suspicion without knowledge (9).

The legal principle of ijtihad will not be discussed but its conditions will be made clear. Omar b. Abdoulaziz, who was one of the Umayyad's Khalif, told about the importance of declaration of ideas of ijtihad. " If the Companions of Muhammad (peace be upon him) do not disagree over a subject, this does not make me happy. Because if they had not disagreed there would not have been anything such as permission ". (10).

THE CONDITIONS AND PILLARS OF IJTIHAD

The pillars of ijtihad can be classified as following as understood from the definition of ijtihad.

1. To spend an effort, it is called " HADS : حدث " in Arabic.

2. Mujtahid : Ijtihad must be done by a learned mujtahid. Work done by any ordinary person is either not an i tihad or it is a search of an old ijtihad, done before by any mu tahid.

3. There must be presumptive secondary legal problem. A search in a field of knowledge rather than law is not called an ijtihad.

4. There must be a legal indication. The mujtahid has to follow the summary, brief general rule and judgements at the same time to obtain a detailed secondary end (11).

In the work of ijtihad general based (founded) and completing conditions which are connected with the personality and the knowledge level of the mujtahid are looked for.

A. General Conditions

1. PUBERTY (" Bulough ") : A person who did not reach the age o

wisdom. He is not a grown up. Some people can be intelligent before puberty but this is an exception. The completeness maturity of wisdom is possible only by the puberty.

2. WISDOM (" Aql ") : As it is in every knowledge, wisdom is obligatory for the knowledge of intelligence. He should not have an illness relating to wisdom.

3. KEEN SEEING (al-Ra'y al-Nafiz) : Learned person must know and perceive the intention deeply from words, and must understand what which do conditions confide in.

4. BELIEF (Iman) : Person who makes ijtihad must firstly believe in deeply the bases and commands in the field that he will do ijtihad that it is understood that his work has been done believingly. The ijtihad done by one who does not believe in the Holy Quran and Sunnah and using the commands in them can not be true (12).

B Base Conditions

One who has the listed conditions and features still can not approach or attempt to make ijtihad. Scholars proposed some other very important conditions for having a trustable ijtihad. That is :

1. To know the language of Arabic. It is necessary to know the language of any law to be an expert specialist in that subject. So it is the first important necessity for the muslim mujtahid to know the language of Islamic Law, the language of WAHY (revelation). He has to know the knowledges of sarf (grammar) nahw (syntax) and balagah (eloquence) and the meanings of words and phrases. Of course he is not expected to know Arabic as much as an Arab poet or literary man who has reached the highest level in Arabic language.

2. To know the rules of Usoul al-Fiqh (rules of Islâmic Jurisprudence). He has to know the general and specific rules how to apply them to the occurring events, what kind of commands can be taken out, and the places where comparison of nusus (texts) happen that he might not fail. He has to know all the rules of logic, the methods of comparison which are fulfilled and followed.

3. To know the fields which are permissable, which are not permissable in principle. To know what kinds of things are forbidden, what kinds of things are not forbidden by the Holy Quran, Sunnah and Ijmaa (the Consensus), what are the things haram (unlawful), mubah (permissable) or doubtful and especially to know what are the use and inconveniences of doubtful and permissable matters to the public from the point of view of goodness (maslahah) that a mistake should not be done in bringing a command into light (13).

C. Principle Conditions

The features of the conditions in this chapter ; one still can not be called a mujtahid although he has the previous condition and features but does not have the following features :

1. To know the Holy Quran (al-Quran al-Kareem) : The mujtahid must know the words of the Quran, the meaning of it one by one and by phrases, the lawful meanings, the intention of legislator, and to know what use is obtained and what king of harm is prevented by the command, the rule. He has to know the Aam (prevalent), khass (specific), mujmal (compendium), sareeh (explicit) and the like of nusous, and the causes of nouzoul (revelation), nasih and mansouh (abolishing and abolished), the rules of preference when there is a conflict of commands.

   Although some scholars claim that it is a necessity for a mujtahid to know the whole Quran, most of them find it sufficient to know and memorize the ayats (*i.e.* verses) concerning to the lawful commands.

2. To know the Sunnah : A mujtahid has to know the sunnah, the source of religion and law. It is possible to learn the Sunnah from the Hadith Books (Kutub al-Ahadis) after register, and from narrators before register. The obligations in knowing Quran are the same here. The mujtahid must know the sunnahs about commands, their places and he must memorize as possible. He must study what muhaddith and scholars told about the hadith of commands and ahkam.

3. To understand the purposes of Shariah : What are the purposes of general and specific commands that Allah and His Prophet ordered. Why that kind of command is ordered ? What are the needs for that rule and what are the good results obtained by it ? What are the agreement and disagreements between the results of the action followed by the commands and the purpose of Shariah ? All these things must be known.

4. To know the general common rules : The meaning of this is to know the basic, total rule and principles of fiqh and jurisprudence. If this condition turns out to be true, the purpose of Legislator can be understood. But these general common rules are relative (nominal) and they change both from mazhab (school of law) to mazhab and according to the decision of mujtahids (14).

According to declarations of scholars a mujtahid has to know the above knowledges in average. Subkee and Baghawee explain that : " If a person knows the Holy Quran, the Sunnah, the places on that salaf scholar (Scholars of Ancesters) agreed and disagreed, the language of Arabic, the knowledge of comparison in detail, it means that he has reached to the rank of mujtahid. Otherwise he does not have to know all the knowledges and everything (15).

D. The Complementary Conditions

The conditions referred here are the ones which are not directly connected with the power and capability of ijtihad. But these are the conditions which are useful and in a way necessary for a mujtahid in doing an ijtihad.

1. There must not be certain indication about the subject of ijtihad.
2. To know the controversal places. Through this way he will not waste his time and he will not neglect existent nass (hukm), commands and ijma (consensus). On the contrary by knowing the contraversial places he can do ijtihad without wasting his time.
3. The honesty and fear of Allah of the mujtahid. Although this is not necessary for the ijtihad, it is necessary for the acceptance and reliability of fatwa (responsa). An impous person can get the same result. But the result that an honest and God fearing person gets is the necessity of his religion and his world whereas the other is only the necessity of his world and his nafs (self, his own personality). The mujtahid has to avoid himself from the effects of desire and bidats (innovation which is evil from a religious point of view).

Because of this condition it is believed that the doctrine (mazhab) of the bidat people is false. A muslim should obey this rule as much as he can ([16]).

That is why after finishing all these general, special basic and completing conditions that a person can be an absolute mujtahid or a mujtahid in a specific branch of law. But those who do not own these features and the admirers of non-Islamic, wordly systems such as capitalism and communism by leaving their religious and nationalist personalities by not taking religious affairs seriously, they tend to connect the other systems by doing supposed ijtihad in Islamic commands. They try to show Islam in that way. This behaviour of theirs is completely sentimental and it is something like the blind's describing an elephant. A mujtahid who does not understand and does not know Islam as it is expected, describes, understands and explains it in a very different way ([17]).

THE IMPORTANCE AND ROLE OF IJTIHAD IN MODERN TIME

Numerious problems that muslims had deting from the rising of Islam, in every century and all times had been solved by ijtihad under the light of mentioned conditions. Mujtahids did their best to serve, helped to codify and accomplish the Islamic Law. The activities of mujtahids had been strong or weak according to the political, geographical and cultural environments that they had. It can be observed that in the latest centuries. The Muslims declined in the field of ijtihad too as they were in the other branches of sciences and knowledge. In fact it had been possible to find answers to numerious problem only by ijtihad and similar ways in Islamic Law. In modern ages, where enough mujtahids do not exist

and lessen, the need for ijtihad increases more than in old time because of the rising problems and the need for their solving. By this, Islamic fiqh that lightened the life and had been practiced from the beginning will be able to answer the legal matters of modern age.

But how will it be possible to make ijtihad in this age that no scholar and learned men train or trained in a serious way as in old times ?

The duty of muslim individual and society is to color the materialistic life with spiritual colors and to make this world a bridge to immortal life. However, such scholars exist among today's muslim scholars that willingly or by force they leave the modren life. They protest everything coming from Christian West or Communist East. Some others very contrary to this group, live carelessly and without hesitation in this world by neglecting religious matters and rules. The last group prefer a medium way between the old and the new in a cautions way. The behaviours of the first two groups are entirely opposed to each other. There is no way to unit and to agree.

But all of them know and accept that ; Islam has suitable commands to find answers for every new thing and is suitable for all times. Islam units and protects its nation by its personality. Whereas optimistic people think in this way, they believe without suspicion that the gate of ijtihad is always open. For pesimistic thoughts religion had been lived and had passed.

Muslim countries under domination, have to make use the seculars laws of developed countries. This is only possible by the tolerans of ijtihad. By this way they think of transferring and prevailing of non-Islamic Law systems instead of Islamic Law (Fiqh) which had been powerful in their own societies.

It can be observed that both groups make use of ijtihad's tolerable gate to defend their own ideas. But according to the optimistic ones ; old nations and scholars had been in a higher level from the point of view of knowledge from today's Muslims and they found commands about every event.

It is even impossible to reach their level from the point of ijtihad. For this reason the gate of ijtihad is only open for those who has the same feature and conditions. Those who defend the opposit idea claim that old ijtihads are inadequate for today's culture and civilization and that those ijtihads do not fit this age. They claim that there is a necessity for renovation by using ijtihad.

As it has been understood from this short explanations, Muslims are in need of ijtihad without any hesitation in every place and all times. Especially in this age that changes and renews. But how will this necessity be answered ?

To answer this question, we have to look at the recent position of Muslim lawyers. The learned men of today have to work together, to help each other as in old times. Only by this way responses can be found to the new improvement in this developing age. It is difficult and at he same time easy for a person to have

all these conditions comparing with old times. It is difficult because the problems are more and more complex compared with old ones. It is impossible for one person to know and to think about these things and decide according to the nass (text). It is easy because there is the possibility of finding the books that consist the conditions and have been written in the field of Fiqh, the jurisprudence and in the field of ahkaam (decisions).

However the press brings all the news from all over the world, although everything written and said can be read and heard from every where, it is above one scholar's capacity to follow all these things. So much so that this is a work of big institutions of rich countries. The work that new generations can do individually is only to make corrections and research on the work. Every individual or scholar counsil follow the way of judgements of nass (decision) of the old people, what kind of judgement were followed by them, and what kind of judgement were left by them too from the view point of knowledge and execution even in this work of research and correction. For this reason, searchers of today can not ignore the mazhabs (Islamic Law Schools) and opinions of juitahid imams (the founders of Islamic Law Schools).

Even Shah Waliyyullah Dahlawee tells that ;

" Everybody must know that there is a great bussiness in accepting these four mazhabs and there is a karm in keeping away from these." He stands his belief to the following hypothesis ;

1. Those who came later always trusted relied on the ones who came earlier. Every Muslim generation took the knowledge and executions of the previous ones and learned them. This happened both by narrative and by transferring the whole works. Although there is not any narration anymore and that this way is left, it is necessary to trust the works of the people before.
2. The members, follwers of these mazhabs are the dominant majority of Muslims. In a hadith ; The Holy Prophet Muhammad (peace be upon him) used to say such as following ;

   ان امتى لاتجتمع على ضلا ة فاذا رائيتم احتلافا فعايكم بالسواد الاعظم

   My Ummah (nation) does not come together on a straying way or is not gathered for a straying way. When you see a dispute and disagreement among them you must follow the ma ority of my nation ". (18).
3. We are living in the time that there are many mouftis who follow their own desires and judges who likes cruelty and badness (19).

For this reason the scholars of old times and their works are so important for us. The people of today have to act according to the law and decision of muttaqi-scholars. Those people tend to follow the strong belief leaving the weak one, when they find that the inclinations of others are stronger, still those mujtahid scholars never try to interprate the judgements in the Holy Quran and the Sunnah and they never deny and refuse the judgements proved by clear or implied consensus (ijma).

The scholars and jurists (fuqaha) used to show great sensitivity to learn the language and ingenuities of shariah, they used to obey to Allah and never left His Sirat al-Mustaffeem. But now, when the interest for Islamic knowledges lessen and that especially when the education of Islamic Jurisprudence weaknes, to make new ijtihads ignoring the old ones by saying that there is a need for ijtihad is something unwise. Most of Our Scholars left their spiritual leadership and gathered under the flag of material things. It can be seen that although they are not scared of Allah, they are scared the rest. However Allah orders as such in a verse ;

وهو القاهر فوق عباده و هو الحكيم الخبير

He is the Omnipotent over His slaves, and He is the Wise, the Knower. " (20).

Because of this human recede and weakness, in this modern age person or councils to make or to do ijtihad that is highly needed still do not exist and can not be brought up. The ideas that some people propose in the name of ijtihad can not be approved because of above mentioned reasons.

In fact, Islamic jurisprudence has never been dull. There are many prosperities in every field of it. But because of the lack of research there are hesitations about it and it is mentioned that there are difficulties. As the need for i tihad is so much our age, the work that people and councils of ijtihad have to do is as much as that. That is, the problems of modern age are more complex and the enemy is more strong and powerful. Even the institutions which give Islamic education, are not qualified to teach the basic sources of Islamic jurisprudence to their members. Universities teach only the basic knowledges. The work to do on this subject is to establish institutions which gather zealous scholars under their roof, which have libraries that consist of the old and the new publications. The education of some basic positive signs which develop recently, comparative law researches besides commentary, hadith and jurisprudence. If ijtihad is done before performing these important knowledges and conditions, and is used to destroy the religion to please the administrators and if response without knowledge is given and said, all these attitudes cause to hurt and humiliate the religion. Unfortunately the number of such people is increasing.

But if highly educated learned men, commentators, hadith narrators, jurists and scholars like them who pay great attention to the religious sciences and services to reach the grade of ijtihad train, they can be trusted and followed. In a hadith Rasoulullah (peace be upon him) says that ;

مثل امتي كالمطر لا يدرى اوله خير ام آخره

" The position of my nation is like rain. It is unknown whether the beginning or the end of it is more advantageous. " (21).

The difference of this age from the previous centuries is this : The research worker (searcher) should not stick to the judgements about the fundamental and subordinate questions of one ...

or he should not begin a new way neglecting all the mazhabs like good ancestors. Great use is taken from each of the mazhabs in essential and in details. Islamic Lawyers answered this question differently : Even if a person reaches the degree of i tihad in our time, is this degree an absolute and independent degree of ijtihad ? According to most of them; past learned mujtahids declared their opinions in every subject that can be taken out from the judgements. They confirmed the principles and systems of ijtihad, so much so that it is not possible for a person to disagree with those principles or to put a new method of ijtihad (22). However it is impossible to find independent mujtahids like each imam of four mazhabs. But it is not right for a person to take one rule that he liked from one mazhab and other rules from different mazhabs. This leads him to wrong conclusion and end.

After all these explanations, to solve the legal and especially the economic problems of our age, trustable mujtahids with trustworthy mazhab are highly needed. This is an unavoidable necessity, to save the youth of Islam from foreign doctrins and from the effect of foreign economic systems.

There are such people in Islamic society that they know some of the religious commands, they do not know the others, they believe in some parts of the Holy Quran, they do not believe in the rest. Through this they announce their complete ignorance and unbelief. These kind of behaviours give the greatest harm to humanity and Islam.

For this reason the scientific councils which will be held, have to put forward the principles and details of Islamic Law and economics comparatively to the Islamic society with a new form and manner. In this manner, new Muslim generation do not run away from religion, and non-Muslims perhaps approach more. Because the face of some rules which seem like new and from the West, can be understood better, to whom they belong, can be seen.

Although it is believed by some that making ijtihad in our times is easier compared to old times, Syeed Muhammad b. Hasan al-Hajawee, who is a believer of this idea says that ; " People must be engaged to the mazhabs of old great mujtahids although there are basic source books for mujtahids today. Because the scholars of today do not have much wara, fear of Allah (taqwa) and precaution. Muslim judge and moufti are the same. " (23). Those who are not infavour of this idea think that : " Although it is possible to get the press from everywhere following and reading the press needs more time and energy and zeal. The problems that new developing sciences cause and the lack of the interest of people for religious sciences are other obstacles to this. For these reasons to reach the degree of mujtahid is not easy (24).

Shortly, eventhough it is possible and permitable to find mujtahids in every century reasonable, in practice it can not be an obstacle to this idea that no absolute or mazhab mujtahids train in some centuries.

THE CONCLUSION AND PROPOSALS

The conclusion got and understood from the passages up to here is this: Ijtihad has a very important place in the development and being of the Islamic jurisprudence that is lived and performed dating from the rising of Islam up to our age. Numerous questions and problems of all ages have been answered and solved by the rules and definite ideas of ijtihad. The books of jurisprudence of great mazhabs are all results of these ijtihads.

Ijtihad has been used for daily life dating from Rasulullah's time. But some rules have been put by learned men to avoid the exploit of such a law institution by people, interpreting the religious judgements by chance and to avoid forced interpretations. The i tihad and fatwa had been regarded invalid when the ijtihad or mujtahid did not have any of these conditions.

In fact, to fulfill these conditions is an easy task, it created difficulty during last ages. This difficulty rised especially because of the change in human nature and the lack of interest for religious sciences. Opposite to this disinterestedness for religious sciences, the question to be answered by i tihad increased in the greatest numbers. Although the solution of these problems from Islamic point of view should have been presented to the youth it had not been done. Today's powerful enemies of Islam using this opportunity because of cultural imperialism, are inspiring and teaching their economic and legal systems of ideologies.

For this reason, the duty of Islamic sciences and muslim countries are ; to teach the new generation the basic religious sciences, to give them Islamic character, to found Islamic Institutions that train specialists in religious knowledges and to do their best both materially and spiritually for this purpose. Another duty of muslim countries, especially the rich ones, is to quicken the religious cultural change to cause to begin the coordinated works, to set up scientific councils of consisting of famous scholars. These council have to be different for the muslims of each continent and it must be possible to let them come together at least once a year.

Scholar must coordinate with their colleagues who work on the same field instead of working individually leaving themselves without any zeal. Besides basic religious knowledges, they have to make use of the progressive technology of the century, basic positive sciences and their principles. They must refer working comparatively instead of working alone. By this way, young generations find the possibility of comparing and learning their religion, law and economies and they can make their Islamic characters stronger than before.

In modern ages only by this kind of work perhaps the ground of ijtihad in a scientific way can be prepared and new answers can be found to the problems of the age. The simple superficial ideas which are presented as ijtihad before completing the conditions, and before preparing the environment for studies, only can give harm to the religion and Muslims. So it is the best way to follow our old

scholars ' way, to be tied up to their mazhab. Because instead of taking the fatwa and ijtihad which is given sentimentally and unscientificly, it is better to select and take the way of Taqwa and ideas which are away from sentiments.

دعواهم فيها سبحانك اللهم وتحيتهم فيها سلام وآخر دعواهم ان الحمد لله رب العالمين .

Their prayer therein will be Glory be to Thee, O Allah ! and their greeting therein will be Peace. And the conclusion of their prayer will be Praise be to Allah, Loard of the World. " (25).

[illegible]

1. al-Bukhari, al-Jami, al-Sulh 5, al-Shourut 9. al-Tirmidzi, al-Sunan, al-Ahkam 3.
2. al-Sarakhsi, al-Usoul Vol. 2/115, Qahirah.
3. Kamal b. al-Humam, al-Tahreer vol. 3/291, Misr Bulaq 1316. Ibn Abideen, Khashiyatu al-Durar vol. 1/57, Misr 1307 Muhammad Musa Tawaanaah, al-Ijtihad p. 98, Qahirah 1973.
4. *See* Majallah Al-Ahkam al-Adliyya article 14. It says that " There is no possibility in a place where there is an explicit nass (hukm). ".
5. Bukhari, I'tisam 20, 21. Muslim, aqdiyah nr. 15. Abou Dawoud, aqdiyah 2. Nasai, ahkam 2, qudzat 3. Ibn Majah, ahkam 3. Musnadu Ahmad vol. 4/168, 204, 205.
6. al-Tahreer vol. 3/292.
7. *Ibid.* vol. 3/292. al-Usoul vol. 2/116.
8. Khashiyah al-Durar vol. 1/57.
9. al-Usoul vol. 2/293.
10. *Ib* .. vol. 1/52. For different definitions of Ijtihad and explanations of it see al-Ijtihad p.98 continue al-Amidee, al-Ihkaam fi Usoul al-Ahkam vol 3/140, Qahirah 1968. al-Ghazzalee, al-Mustafa vol. 2/354, Misr Bulaq 1324.
11. al-Ijtihad pp. 121--124.
12. al-Ihkaam vol. 3/129. al-Mustasfa vol. 2/51, 52. al-Taqreer vol. 3/294. al-Ijtihad pp. 160—167.
13. al-Mustasfa vol. 2/351. al-Baydzawee, al-Minhaj vol. 3/126, Misr, Bulaq 1316.
14. al-Mustasfa vol. 2 350—353. Sharh al-Asnawee li al-Minhaj, vol. 3/200, Misr, Bulaq 1317. Shatebee, al-Muwafaqaat vol. 3/351-352, 4/105—106, Misr 1970. al-Bikharee, Musallam al-Suboot vol. 2/363, Balaq 1322. al-Ijtihad pp. 179—193.
15. al-Subkkee, Jam al-Jawami vol. 2/383, Misr ? *See* for more information al-Ijtihad pp. 194—199.
16. al-Taqreer vol. 3/292-293, 294—296, 298—300, 301—304. al-Asnawee vol. 3/314, 315. al-Muwafaqat Vol. 4/105—107.
17. al-Ijtihad pp. 201—105.
18. Ibn Majah, fitan 8, Musnadu Ahmad vol. 4/278, 357, 383.
19. al-Dahlawee al-Imam Waliyyullah b. Abdirrahman, I'qd al-Jeyd fi Ahkam al-Ijtihad wa'l-Taqleed pp. 28-29, Qahirah ?
20. Quran, al-An 'am (6)/18.
21. Tirmidzi, adab 81. Musnadu Ahmad vol. 3/130, 143, 4/319. Ibn Qayyim al-Jawziyya, I'lam al-Muwaqqiiyan vol. 2/358, Misr 1955.
22. al-Suyutee Jalal al-Din, al-Radd ala man akhlada ila al-Ardz p. 38 continue, Qahirah ?
23. Syed Muhammad b. Hasan al-Hajawee, al-Fikr al-Samee vol 4/469—474, Tunisia 1336.
24. *See* for more information al-Ijtihad pp. 311—345.
25. Quran, Yunus (10/10.

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EDUCATIONAL INSTITUTIONS DURING THE EARLY ISLAMIC PERIOD

During the 'Jahiliyah' period, the Arbs generally did not possess knowledge of any subject except poetry, which was the product of purely desert conditions.[1] The little knowledge which was possessed by 'Kahanna' was also limited to making prophecies and foretelling about the coming events,[2] which did not serve any purpose. It is, however reported that in Makkah Sufiyan bin Umayyah and Abu Qays bin 'Abd Manaf, were the first persons wholearnt this art from Hirah. The first person who adopted the profession of teaching, belonged to Wadi al-Qurra.[3] Gradually some other people also learnt reading and writing, with the result that when Islam made appearance, there were seventeen persons among the Quraysh, who could read and write. The Ansars were almost ignorant of writing[4]. This can as certained from the fact that the Prophet released some of the prisoners of the battle of Badr on the condition that if they could not pay any ransom, they would teach writing (كتابت) to the children of 'Ansars'[5]. Nevertheless, the Jews of Madinah and Christians of Najran had developed some educational system to impart religious knowledge.[6] Any how we do not find education playing a great role in the life of pre-Islamic Arabs. But with the rise of Islam, there arose a great literary movement due to the following reasons :—

(a) It was essential to prepare a group of people, who could read and write and spread the religious knowledge to the masses. The Prophet, therefore, encouraged such persons who showed their interest in learning of different subjects. He also encouraged people to learn different languages. When the Holy Prophet sent some of this companions for the propagation of Islam in different tribes and regions, the selected such persons who were well conversant in the language of that tribe, or could atleast express their ideas in most convincing manner.[7]

It is reported that Zayd bin Thabit learnt Hebrew language in 17 days.[8] After the demise of the Holy Prophet, when the Arabs conquered many adjoining countries, the vanquished people thought it necessary to learn the language and the literature of the conquerors.

(b) Islam had raised the intellectual status of the Arabs. So there arose a keen desire for learning. The Quran has explained the historical events of the past nations which induced them to maintain their own history and other concerned learnings [9].

(c) The way which Islam had adopted in expressing and establishing the belief in the authority and attributes of God, was an open invitation for the believers to think and discover the wisdom of God from the external manifestation. [10]

These factors opened a way for many great literary movements, right from the time of the Holy Prophet down to our own times to flourish. During this life time, the Prophet was the source of all knowledge and research. After him, a

certain group of companions centred all their attention at imparting religious knowledge, whereas, the rest of the ' Ummah ' engaged themselves in waging wars against enemies of Islam, in and outside Arabia. There are three categories of literary persons *i.e.* Umar Faruque, Ali, Ibn Masud and Zayd bin Thabit are considered to be in the first group. Some of the people also count Muadh, Abu Darda, Ibn Abi Ka'b and Salman, the Persian, in this class. In the second category, about twenty names have been mentioned, and there are about 120 persons in the third category [11]. The most of these companions remained in Madinah and studied Quran, ' Hadith ' and ' Fiqh ' there, but some of them migrated to other big towns in Islamic state, *e.g.* Ibn Masud, Ali bin Abi Talib, and his son Hasan Sa'd bin Abi Waqas, Abu Musa Ashari, etc. settled in Kufah.Umar sent Muadh bin Jabal and Abu Darda to Syria for this purpose, who spread their knowledge in that part of land [12]. Similar was the case of Makkah, which owes its reputation to Abdullah ibn al-Abbas, a cousin of the Prophet. He was best known as a traditionist as well as a jurist. Basrah was another important town of intellectual activity in the Muslim world. The famous founder of Arabic grammar, Abu al-Aswad also flourished there. He was the pupil of Caliph Ali [13].

We have already mentioned that there were hardly any recognised educational institution in the peninsula, as such, the mosque served as the first laboratory and nursery ground for the evolution and development of Islamic educational system.

(*a*) *The Mosque*.—Since the advent of religious thought, place of worship has commanded endearment and respect of all people. Even before, the idol worshippers exposed great trust in the place of their worship. History of the world is strewn with the tales of offerings and sacrifices made at these citadals. Many great kings and dignified men of the age, took pride in participating the rites conducted at such places. But Islam does not derive its strength from fixed idols, rather it derives from the image of God reposing in the hearts of men, as such, it could hardly be contented with such limited scop of its place of worship. Islam is not the name of certain fixe formulae, ideals or beliefs. It is a fluid and lucid spirit flowing through an enlightened ' Ummah ', and bedding it into a cohesive mass. The place of worship of such a religion, could only be a broad based control unit, duly entrusted with the social infrastructure. To achieve this purpose, the Holy Prophet (peace be upon him), laid down the foundation stone of ' Masjid al-Qubah ', while going to ' Madinah' from Makkah [14]. This is the first mosque of Islam. Then on arrival in Madinah, he built the famous mosque of Prophet and worked as a labourer with other companions [15].

From its very inception, this mosque became the centre of attraction for all the Muslims to come. With the triumphant march of Islam to the crescent land the Arab soldiers constructed the mosques every where, to offer the daily prayers which was its basic object [16].

The mosque became an educational institution during the very life time of the Holy Prophet. During Friday sermon he used to teach the Muslims, the Book and the Wisdom. Then after every prayer, he sat in the mosque for sometime, not

only to settle disputed affairs but also to impart knowledge by interpretation so to remove suspicions arising in the minds of the believers[17]. The initial training opened a way to the development of different branches of knowledge like 'Tafsir', 'Hadith', 'Fiqh', 'Qasas al-Anbiya', history, etc. In such sittings, Holy Prophet occupied a central position and the audience sat around him in circle[18]. The tradition was followed by the later Muslims, and it is still practised in the mosques every where in the Islamic world.

In early times, only grown up Muslims were allowed to attend the 'halqah' (circle) in the mosques, because it was required not to disturb the calm atmosphere of the mosque by the interference of the children. Moreover, such matured persons were required to be sent to the conquered countries to educate the new Muslims. And so far as the young boys were concerned, they were either trained by their parents in their houses or in the private 'Kuttab', where they learnt their elementary knowledge, and by the time they gained majority, they also joined the mosque circle of learnings.

Thus encouraged from this system of education, early Muslims built a number of mosques, everywhere in the conquered places. It is reported that Umar I, issued instructions to the governors of various provinces to construct a big mosque in every principal city of the province for Friday prayer. The tribals were also instructed to build up mosques for daily prayers[19].

With the march of the time, the mosques became the centres of various branches of the knowledge and the students flocked from far and wide in order to quench their thirst of knowledge from these fountains, and after being benefited, returned to their native places to disseminate, what they had learn from their worthy teachers. In Makkah, Abdullah bin Abbas, the famous commentator, held his siminar of 'Tafsir' on every Thursday in Ka'bah[20]. In Madinah, in the Mosque of the Prophet, Malik, Hasan and other renowned scholars of Madinah used to deliver leactures on Philosophy of Law[21]. In the famous mosque of Basrah, Hasan Basari gave lectures on various topics[22] In 'Jamae Umar' of Egypt, Sulyman bin Umar used to teach the stories of wisdom[23]. In some of the big mosques, the teachers of different schools of thought held their seminars at a time in different corners of the mosques[24].

The education in the mosque was free and voluntary[25]. The Ummayyads, however, used this institution to gain public opinion in order to save and establish their political sovereignty against other claiments *i.e.* the Hashmites, Kharijites and other elements of the new society. For this purpose, they appointed leading scholars, reputed 'Qurrah' and famous 'Qussas' on handsome salaries. Their services were hired to educate the masses in such a way that they might not raise their heads against them[26]. Anyhow, the students came there and learnt 'Tafsir' Hadith, Fiqh, Law, Philosophy and other current subjects[27]. At the same time, the teachers of all schools of thought were allowed to preach their ideas so long

Thus by the end of the first century of the Muslim era, there sprang up many literary movements out of this educational system. The famous founders of four schools of Fiqh, biographers, historians, thinkers, philosophers and theologians, who flourished during the later Umayyads and the Abbasids, were either the beneficiaries of this institution or their pupils.

(b) *Al-makatib.*—The word has been derived from ' al-Kitab '(الكتاب), meaning a written thing, and Makatib is a plural of Maktab, means a place where writing is conducted[28]. The Arabs of ' Jahiliyah ' period were almost ignorant of this art, but still, in some of the historical records, it is reported that education was conducted in private houses which were known as ' Kuttab '. But it was undertaken on a very limited scale. The first place of such nature was established in Wadi al-Qurra, where some of the Arabs learnt reading and writing[29]. With the rise of Islam, the taste for reading and writing the Arabic language, however, developed due to the factors already discussed.

First of all it may be mentioned that the Arabs were very particular about their language, because it was the only medium of expression. Their poetry, idioms and speeches were very dear to them and they were all in Arabic language. Since they were very much fond of poetry, the poets and orators aroused their feelings in times of wars as well as in social gatherings. This value and worth of Arabic language continued to develop more after Islam, because the Prophet himself was a pure Arab and the ' Quran ' was also revealed in a Arabic. But with the conquests of Persia and Syria and other countries, and from mixing with the conquered nations, the Arabic language began to decline and the dullness of the towns began to commit mistakes in the language[30]. Such mistajkes were even committed by the educated persons like Al-Walid I, Hajjaj, Abu Hanifah, Shabib bin Shiba etc[31].

In such circumstances, the only safe place was the desert because the beduins maintained the purity of language. The desert, therefore, served the training place for the learning of pure Arabic language. The Arab aristrocrats, therefore, sent their children to desert to learn the poetry and correct Arabic language from the desert dwellers[32]. The Umayyads also sent their young princes to the desert with the same purpose. On seeing this value and command over the Arabic, some of the expert bedouins migrated to the towns and conducted language classes with or without tuition fee, to the children of those who could not afford to send their children to the desert[33].

This was only in case of language, but for the education of other subjects, the children generally learnt from their parents or in the private ' Kuttab ' which were established by private teachers at certain places. In these institutions, the children learnt only elementary knowledge of reading, writing and accounts, because the higher education was only conducted in the big mosques where the young ones could join only after their age of maturity.

Besides, Holy Prophet had prepared a team of workers who had devoted whole of their life for preaching Islam and disseminating religious knowledge. They were initially twenty in number and known as 'Ashab al-Suffah', among whom the persons like, Abu Hurayrah, Talhah bin 'Amr, Wathlih bin Al-Asqab, Talhah bin Obaydullah etc. are noteworthy. The pious men spent whole of their night in worship and reciting the Holy Quran and whole of their day either in hearing from the Prophet or in preaching the principles of Islam and imparting knowledge to the tribals[34]. Thus the institution of 'Ashab al-Suffah' played another role in the conduct of education. This was the first educational institution established in the day of Prophet inside the mosque, but it vanished after the demise of the Prophet.

Anyhow the 'Kuttab' in early days were generally maintained by the Jews and other non-Muslims, who did not know anything about the Quran and tradition the necessity, therefore, arose to open separate institutions, to teach Book and Tradition to the Muslim children. This work was done by some voluntarily on small scale in their private houses[35]. Umar the Great was, however, the first Caliph who showed keen interest, in the development of education and appointed qualified teachers at various places in the dominion. He is also reported to set syllabus which consisted of swimming, horse riding, Arabic idioms, good poetry, grammar, accountancy, etc. He is also reported to set a separate syllabus for the girls. He had sanctioned stipends for the education of the children of the tribes and appointed inspectors to supervise the institutions and also to see that the people send their children to those institutions and punish those who failed to do so[36].

The Umayyads did not stop the missionary work. Rather, it was taken up with more zeal and at a more rapid rate. Ultimately, the education flourished rapidly First of all, they appointed the trained teachers to teach the children of royal family and then hired the services of such persons for the education of the rest[37]. Umar bin Abd al-Aziz was so much particular to educate his children that once he intended to inflict physical punishment on them for committing the grammatical mistakes[38] He patronised education so much that he appointed Ibn Abi Habib as Chief Judge of Kufah who was basically a teacher[39]. The famous 'Kuttab' of the period was that of Abd al-Qasim Balkhi, where thousands of students studied at a time, and to look after such a crowd, he had to take a round on donkey's back[40] Similar institutions were organised by Dhahak bin Mazahim and Abdullah bin Harith who taught the students without charging any tuition fee. According to him Imam Malik, Alqamah bin Alqamah, a "Mawla" of Ayeshah, had established a similar institution, where he taught Arabic grammar and art of poetry. The famous Governor of Basrah, Hajjaj Thaqafi, was also a teacher in Taif during his early career[41]. There were certain schools, where nominal tuition fee was realised from the students. Such was the case of Yusuf the father of Hajjaj. On this basis the opponets of Umayyads, particularly the Shu'ubians slighted [illegible] in their poetical verses.

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In a religion like Islam which aims to promote the social structure in such a way that there should be peace and order, the women could play a vital role by educating and bringing up of their children. In early days of Islam, though the number of illeterate women was much greater than those of educate men ; yet certain names have come down to us which indicate that the women of early Islam had developed a taste in education. According to Baladhuri there were at least five women, such as, Hafsah bint Umar, Umme Kulthum bint ' Uqbah,' Ayeshah bint, Sa'ad, Karimah bint Maqda and Al-Shafa bint Abdullah ' Adwiyah, who knew reading and writing in early Islamic period, particularly the last one was the teacher of Hafsah, to whom the Prophet had asked to continue the education even after his marriage with the latter. Ayeshah and Umme Salmah, the wives of the Prophet could only read, they did not know the art of writing[42]. This example of Hafsah opened the way for other women to learn more and more about religious education. It is not certain whether the women of Prophet's time went to separate ' Kuttab ' or otherwise. However, it is a fact that once some women approached the Holy Prophet to fix a day in a week for the education of women and he accordingly did so.

With the passage of time, the women showed more interest and learnt different subjects like Tajwid, writing Arabic, elementary knowledge of religious affairs and particularly the Philosophy of Law. According to Ayeshah, " The women of helpers never hesitated to learn the last one, though the subject is dry in nature ". They also took keen interest in learning Tradition and Fiqh. Ibn Hajar has given an account of 1543 such women who were well versed in Hadith. Some of the women learnt literature and oratory. The wife of Farazdaq, the famous poet of Arabic literature of early Umayyad period, had such a mastery over the poetry her husband and his contemporary, Jarir, used to seek her opinion about their work[43]. Jamilah and Sukaynah were other two ladies who had developed a special taste for the literature, poetry and music[44]. Some Arab women had learnt the rudimentary knowledge of medicine as well[45]. On the top of this, the entire education was conducted and achieved within the four walls of the houses.

(c) *Libraries.*—During Prophet's period, reading and writing was a rudimentary art. Excepting a few copies of letters written to various rulers of the neighbouring countries, some pacts made with the Jews, Christians and the Quraysh, and verses of the Holy Quran, no other compilation or record existed. The question of well founded libraries, therefore, did not rise at all. Of course, when the Arabs came into contact with Persia, Syria and Egypt, during the period of orthodox caliphate, they got an opportunity to witness elaborated institutions, such as, the libraries of Alaxandira, Nisibin, Qinisrin, etc. where the ancient and valuable books in Greek, Persian and Syrianic languages were reposed[46]. The Arabs derived benefits from these books, which inspired them to establish such institutions. First of all, they took steps to translate the books of different subjects, and then, they tried to publish them for the benefits of the students and scholars. But no serious efforts were made to establish a library till the time of Khalid bin

Yazid bin Muawiyah, who made very good collection of books of different languages and subjects, which served as the basis of library science during the epoch[47].

The ultimate effect of all this panorama of efforts was establishment of well documented libraries all along the path of Muslim consquests, particularly in Spain, Baghdad, Samarqand, Bukhara, etc.

(d) *Hospitals.*—The initial work in this connection was started with the advent of the Umayyads, who got a number of medicinal books translated into Arabic and published them for the public.[48] Walid bin Abd al-Malik was, however, the first Arab ruler who established well equipped hospitals in Damascus and employed foreign experts, not only for the treatment of patients, but also for the education of students who were interested in medical science. He is reported to have established a similar medical institution for the patients of leprosy.[49]

(e) '*Ulama*'.—With the change of capital from Kufah to Damascus and with the rise of the Umayyad Empire, there also occurred a very important change in professions and habits of the people. The Umayyad state was built on the support and the royalty of the 'Quraysh'. They were, therefore, the principal beneficiaries of this political change, and most of them had practically migrated to Syria and to the principal seats of the government in different parts of the empire.[50] The other two main contenders for political power were the Iraqians and the Hijazians. But when they were excluded from a share in it, they embarked on other means to run down the government and bring down the fall of the Umayyads.[51] One of the means, they adopted, was the development of political theory, that condemned the Umayyads as ussurpers and opportunists, and preached an idealism that was never realized in the history, either in their own days or in later times.[52] This work was done by the leading 'Ulama' of Hijaz and Iraq. The Ulama in those times constituted a distinct class of people, and became a recognized institution, which aspired to dominate the entire political and social life of the Muslims ; althought it never succeeded in doing so. This negative attitude of the religious scholars, created a change between state and religion, which has continued through history upto our own times. The Ulama were divided into two sections. One section was employed in the service of the state and functioned as judges of different courts at different levels, as Imams of Principal mosques of provincial and regional headquarters, as religious guides in the army, as revenue officers, as advisers to the caliphs and the governors, and in many other important capacities.[53] The other section of the 'Ulama' stood in opposition, and its main performance was to discredit the government to conspire to bring it down. Most of the stories about the religious unscruplousnes of the Umayyads, and the open violation of the sacred law by them, are the ficticious products of these 'Ulama'. They at least once succeeded in challenging the state authority with the help of arms. In the dangerous revolt of Ibn Ashath, most of the leading jurists of Hijaz and Iraq participated.[54] Although they failed to achieve their purpose, the event is, however, a clear demonstration of the intense ill-feeling that a section of the Ulama harboured against the Umayyad power.

No one can deny that the Ulama in those times preserved the essence of Islam and performed a great service in applying the faith to the practical necessities of the life and to the creation of a new social order. But it must be remembered in this connection that the organized work of projecting Islam into the daily life of the people was done by the Umayyad rulers, not by the Ulama. And the truth can be estimated from the following facts :—

(*i*) The Umayyads made the Arabic as a state language for the first time in the Islamic history.[55]

(*ii*) They gave a currency to the new Islamic coinage system.[56]

(*iii*) They saved the Quran from the corruption of human hands by fixing 'Irab' on the text.[57]

(*iv*) They appointed a group of Ulama and jurists for the preparation of Islamic jurisprudence and equally utilized the works of the Ulama in opposition.[58] It is, therefore, true to say that the entire judicial structure and the great corpus of the applied Islamic Law that was codified under the early Abbasids were based on the Umayyad state practice.

(*v*) They gave an impetus to the art of Quranic interpretation. The first book on the subject was written by Said bin Jubayr, on the initiative of caliph Abd al-Mälik.

(*vi*) Umar bin Abd al-Aziz issued a special directive to Qadi Abu Bakr, his governor to collect authentic Traditions.[59]

(*vii*) The book on the principles of Arabic Grammar was prepared by Abu-al-Aswad Duali with the permission of Ziyad bin Abih.[60]

One also notes with great astonishment that most of the Ulama in opposition, flourished in Madinah, from where they preached the high ideals and faith and morality.[61] But in the same place there developed, the great schools of art, music and free living.[62] The Ulama were, however, content with two things :—

(*i*) with condemning the Umayyads ;

(*ii*) and with propagating the knowledge within their own circle. By and large, the community as a whole did not take much inspiration from them. Nevertheless, they did command a general respect of the populace and were undoubtedly the custodion of the faith. It may, however, be observed that most of their sentiments are product of later history. In their own days, Ulama were treated as ordinary men, and not as supermen, who preserved the religion in the face of very heavy odds.

Among the Ulama, the most important section was that of the jurists, who were concerned with the practical application of the sacred law. They, therefore, enjoyed a status in the government as well as in the opposition, and there were some famous personalities on either sides. For instance, Al-Zuhri, Makhul, Nafi, Abdullah bin Umar, Rajab bin Haybah, etc. served the state, while in

opposition, there were seven great jurists of Madinah, particularly, Kharijah bin Zayd, Urwah bin Zubayr, Said bin Musayyib and their pupils like Said bin Jubayr and others.[62]

It has been carried on all through history and utterly false propagation that the Umayyads were only lukewarm Muslims, they had adopted Islam for mere political sascendency, and because they were not sincere, they did not enforce the Islamic Law in their empire[63]. But the truth is that, it were they who really converted Islam into a state, and it were they who built a strong and extensive legal system on the production of Islam and a system that soon became an ideal model for all Muslim states in later times. In this building process, the entire body of the Jurists participated whether they were on one side or the other.

(f) *The Institution of the ' Qurra '*.—' Qurra ' is the plural of the ' Qari ' means a reader, but it is a special term in the religious life of early Islam. During the first century of the Hijrah, the term ' Qari ' was applied to a person who knew the Quran by heart, and could also explain and instruct it to others.[65] It did not mean a person, who could recite the Quran, according to the rules of Phonetics, and who was used for ceremonial occasion. A ' Qari ', in these days was a very important person, and often a state official.[66] We know that at the battle of Siffin, where an effort was made for compromise between the two warring sides, a good number of ' Qaris ' came out from each army and met on the battle field to negotiate and thrash out the term of treaty, which did not materialise, for reasons that need not be discussed here. Also, the men who raised copies of the Quran on the points of their lances in the same battle, were these very ' Qaris '.[67] No one else enjoyed the respect and dignity that they did.

The ' Qaris ' were employed as state functioneries in different capacities. They were appointed in the great mosque to educate the people about the Quran, in educational institutions to instruct the youth of the community and in the army to serve as moral and religious guides as well as to propagate Islam in the conquered lands. The most important function of the ' Qari ' was to lead the " Jumu'ah prayer ". He informed the people about the current policy of the government and persuaded them as a matter of religious duty to extend their support to state.[68] Everyone knows that it was from this pulpit that the Alids condemned the Umayyads and the Umayyads condemned the Alids.[69] So that ' Qari ' had to perform also a very important political duty that of winning over the people to the side of the government through the Friday sermons and other public centres.

(g) *The ' Qussas '*.—As mentioned above and referred to by the Holy Quran, the Arabs were influenced in evolving historical discipline by the stories of the past events which reached them. But the art of recording historical events could not assume a lucid form before the advent of the Abbasids. Nevertheless, certain foundations were laid down during the Umayyads on which the infrastructure of a well-defined art of history writing was later constructed.[70] In evolving this art, the mamothian memory o fthe Arabs played a significant role. The affairs of the

past, concerning to the fate of tribes or of common interest, were passed on to them from heart to heart. This inherited trait developed into them, the art of story telling. The period of early conquests of Islam provided them with new topics and matters of mutual discussions. Whenever the retired Arab soldiers sat among their friends and relations, they generally talked about their chivalry, valour, scarifice and other achievements which they had attained in different battle fields. Thus by and by the art of story telling became very popular among the masses. With the advent of the Umayyads, this art became a regular faculty, and men of high stature and learning were appointed to it. According to Masudi, Muawiyah was very fond of listening tales of past nations. For this purpose he imported a story-teller, Abid ibn Shuryah, from Al-Yaman who entertained the Caliph almost every night with the tales of the past hereos.[71] His successors also patronised such artists. For example, the pious Umar bin Abd al-Aziz appointed Muslim bin Jundab, as Iman of the Mosque of Prophet in Madinah, who was a famous story teller of that time.[72] Another important figure of the era was Musa bin Syar al-Aswari who was given a title of " the wonders of the world.[73] (اعاجيب الدنيا) He attained mastery in Arabic and Persian both. While explaining and interpreting Holy Quran, he used both the languages alternately for the Arab and the Persians.[74] Jahiz has mentioned several other names of such personalities, among whom Ibrahim Tamimi, Abdullah bin Amir, Abu Bakr Hazli and Mitraf bin Abdullah are noteworthy[75]. Hasan Basri was also a story teller and used to teach wisdom and morality to his disciples by reciting short and useful stories.[76]

These story tellers were not merely street mongers, and their art was not a time passing profession ; rather they were most reputed persons of the age and often delivered their lecutres in the mosques.[77] Tamim al-Dari was the first person who started this practice in Islam during the regime of Umar I. He was also the first to kindle the lamp in the mosque. First he was a Christian and then became a Muslim. Thus he introduced many Christian traditions and biblical stories in Islamic literature as did Ka'b Ahbar to spread Jewish literature.[78]

Abu Ali Aswari was another story teller who had mastered the art of ' Sirah ' and ' Tafsir '. He started explaining the Chapter " The Cow " in the mosque and before his death he had by and by finished trascription of entire Quran. Yunus bin Habib derived his compilation of ' Kalam al-Arab ' from such hearings and recitals of the noteworthy scholars of his age.[79]

It is clear from the above that these persons were religious scholars and employed in the service of the state to carry on incessant propagation in favour of the government. They were always attached to mosques where they addressed to people frequently and some places regularly every night.[80] They were very intelligent and eloquent speakers who quoted extensively from the Quran, the life of the Prophet and the early achievements of Islam to bear on the minds of the listeners that the present policy of the government was exactly in keeping with the classical standards and true requirements of Islam, and that the criticism and the

objections of the opposition, were baseless and detrimental to the interest of Islam, as well as to the Muslim community. These 'Qussas' were the best broadcasting medium of that day; they also performed the functions of the modern press, because they were spread all over the caliphate and possessed the means and facilities to propagate at large with whatever they were interested.[81] This institution was, therefore, one of the most important departments of state and was equivalent to the modern Ministry of Information. It was, of course, organized on different lines but performed more or less the same functions as the Information Departments do in the modern governments.

(h) *The Poets.*—" The poet is a heroic figure belonging to all ages; whom at ages possess, when once he is produced, whom the newest age as the oldest may produce; and will produce, always when nature pleases ".[82] And pre-Islamic Arabia has produced many such hero poets in different times. We can at least mention the seven great creators of golden " Mullaqat ", which are a testimony that the land of Arabia inspite of its illiteracy was never free of such great men. Its soil may be barren for cultivation but it is very fertile for the production of poetry.[83]

In the intellectual life of a nation, there are two factors that play an influential role in its formation. The one is the natural conditions, such as, the mountains, the rivers, the desert, the orchards, greenary, etc, the other is the social collective order; such as, the family, the tribe, the state, etc.

The Arabs were the inhabitants of desert. There was burning sand below and the shelterless scorching sun above. For and wide it was all a desert of glaring sand with no tree or greenary, making it impossible for anyone to cross the desert. The winds were hot and dry. The great serine atmosphere of the desert with intensive heat of the scorching sun, piercing through it, the vast exp anse of white illumination spread all over the moonlit night, the shooting of stars in the open clear vast bloom and barren plains, all produced a peculiar sensational effect on the unsophisticated disposition which the people of compact population could hardly appreciate. This is one of the reasons why even the music in a desert is of one description and produce the same note again and again. This music is dreary, difficult and splendid, and has curious effect on the souls of the inhabitants of the desert which holds their breath, sends them into ecstasy and leaves them into a state of trance. Hence it is no wonder if the peots of the desert sing the same verse and play on the same note ever and anone.[84] And it is also to this effect that the Arab poetry which is the only literary legacy, was simple, dry and natural. The defect in early Arabian poetry was that the one would find reasoning and arrangementation lacking, sequence of thought entirely absent, meaning wanting and difficult to be translated in other language with the same spirit.[85]

Since they lived in tribal order, and remained at daggers drawn with each other, the effect of it was that their poetry was full of chivalry. Every tribe had its own poet who used to compose the verses to arouse the brave men of his tribe

and condemn the enemy. It is the main reason that most of the Arabian poetry was composed during 'Ayyam al-Arab' (the Days of Arab) particularly the Basus war[86]—a war initially started on a very petty matter of the camel belonging to a lady namely Basus and that continued for forty long years with reciprocal raiding and plundering but with little bloodshed.

Another occasion where the essence of Arabian poetry was tested was in the famous fair of *Ukaz*, where the Arabs of 'Jahiliyah' period gathered once a year. Besides other games, there used to be held a poetic competition.[87] The authors of seven golden odes got their first prize in the same tournaments. It is said that Imra' al-Qays was the first who achieved this honour.[88] In greatness, he can rank with Homer, Shakespeare, Hafiz and Ghalib. After the advent of Islam, the natural environment remained the same but the social conditions changed abruptly, and the Arabs of desert became the busiest people in connection with the religious wars in and outside Arabia.

In the changed circumstances, we find a definite change in the composition of poetry. Instead of personal praise and tribal pride, the religious sanctity, Prophet's admiration and God' greatness were expressed. In the days of Prophet, Hassan bin Thabit achieved a great name in such poetry.[89] In the days of 'Rashidin', the poetry was included in the syllabus for the education of the young children.[90] But inspite of this, the period could not produce a great poet worth mentioning.

But for the intellectual development of the Arabs, the Umayyads period is really very famous. The reason being that as a result of rapid conquests they had abundance of wealth and free time to indulge in the life of gaiety and pleasure, which is a pre-requisite for the development of fine arts. Since the Arabs had inherited the poetical qualities from the ancient time, they once again revived their links with the poetry and gave birth to a new Arabian Islamic culture. However, their poetry took a new turn and a new shape that was full of love and romance ; which were almost absent in the pre-Islamic literature. The best example of this art is 'Amr Ibn Abi Rabiah (d. 719 A.D.). He gained the title of 'Abu al-Khattab', the father of oratory.[91] He was followed by two more prominent poets of the age, namely, Abu Sakhr Kathir Izzah(d. 105 A.H.) and Abi al-Harth Ghilan ibn Uqbah (d. 82 A.H.). Both were famous for love poetry.[92] Jamil bin Abdullah (d. 82 A.H.) was another poet, who stood for pure love poetry. Many verses regarding the loving couple 'Layla and Majnun' are said to be composed by him.[93] The love story of the couple may be a fiction, but the expressions of Jamil made them the heroes of many romantic stories in Arabic, Persian, Turkish, Urdu, Punjabi, etc.

Another school of poetry was headed by Akhtal (d. 710 A.D.) Jarir (d. 729 A.D.) and Farazdaq (d. 732 A.D.),[94] of whom, Farazdaq was attached to Abd al-Malik and his son Walid, and Jarir devoted most of his time to famous Umayyad governor, Hajjaj bin Yusuf Thaqfi. The latter two were great satirists and very

often criticised each other.[95] It is apparent that such poet could only keep their existence by writing poems in the admiration of the rulers and condemning their enemies. Similarly the Umayyad opponents had their own poets who carried out the propaganda work against the rulers. As a result of this, a sort of political poetry took birth in this period.[95]

The poetry was the best hobby of the Arab aristocrats and the rulers for free times. As such the poets attracted to the principal cities of the dominion to participate in the literary gatherings and received handsome awards. It is reported that once in such a party a bedouin showed extraordinary wit in the presence of Caliph Abd al-Malik, who asked him to recite the best verses of different kinds of poetry. The bedouin recited all such verses of the poet Jarir, who was also sitting in the assembly. He was so much delighted that he requested the Caliph to pay his share of award to the bedouin.[97]

Thus, it would be seen that the education, refined and polished the roughness of the bedouins upto such an extent that within one century of Islamic era, the illiterate and uncivilized people became the most civilized nation of the world and reached the climax of the mental development. And the culture which sprang up as a result of these efforts, became universal and remained dominating for centuries to come.

It is, however, noteworthy that this entire task was carried out during the Islamic conquests which is the period of Arab domination and which came to an end with the collapse of the Umayyad regime. These conquests brought with them immense wealth and valuable goods which on the one hand promoted the growth of culture through different branches of education and on the other hand bread a life of ease and indulgence, comfort and luxury and gaiety and pleasure.

NOTES

1. Ibn Khaldun, Muqaddimah, (Printed by Abd al-Rahman bin Muhammad) p. 450.
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3. Baladhuri, Futuh al-Buldan (Beruit, 1958), p. 389.
4. *Ibid*, p. 389.
5. Ibn Sa'd, Tabaqat Kabir (Beruit, 1960) Vol. I, p. 24.
6. Ibn Hisham, Sirah, Vol. II, p. 222 ; Baladhuri, Futuh al-Buldan (Egypt, 1931), p. 58.
7. Ibn Sa'd, Tabaqat Kabir, Vol. I, p. 264.
8. Baladhuri, Futuh al-Buldan, p. 141.
9. Ahmad Amin, Fajr al-Islam (Cairo, 1960), p. 142.
10. *Ibid*, p. 143.
11. Ibn Sa'd, Tabaqat Kabir, Vol. II, p. 104 ; Fajr al-Islam, p. 146.
12. Ibn S'ad, Tabaqat Kabir, Vol. II, p. 117.

13. *Ibid*, Vol. II, p. 110.

14. Ibn Hisham, Sirah, Vol. II, p. 11.

15. Tabaqat Kabir, Vol. I, p. 240.

16. Yaqubi, Tarikh (Leyden, 1860 A.D.), p. 250.

17. Bukhari, (Egypt, 1345 A.H.), Chapter al-Salat.

18. Bukhari, Kitab al-Ilm, Vol. I, p. 428 ; Ibn Khallikan, Wafyat al-' Ayan, (Egypt, 1948), Vol. I, p. 257.

19. Yaqubi, p. 250.

20. Bukhari, Kitab al-Ilm, Vol. I, p. 429.

21. Ibn Khallikan, Vol. I, pp. 257-8 ; Yaqut, Mujam al-Adibba (Leyden, 1907), Vol. IV, p. 125.

22. Ibn Khallikan, Vol. II, p. 252.

23. Maqrizi, al-Khitat wal-Itibar, (Cairo, 1280 A.D.) Vol. II, p. 253.

24. *Ibid*, Vol. II p. 216, Ibn Jaybar, Rihlah (Leyden, 1902) pp. 266—71.

25. Ibn Khaldun, Muqaddimah, pp. 276-7.

26. Maqrizi, *Op. Cit.* Vol. II, p. 253.

27. Ibn Khallikan, Vol. I, P. 257 ; Duha al-Islam, Vol. II, p. 76.

28. Mubarrad, al-Kamil (Egypt, 1365 A.H.), Vol. I, p. 57.

29. Baladhuri, *Op. Cit.* p. 147.

30. Ibn Khaldun, Muqaddimah, p. 403.

31. Ibn Abd al-Rabbihi, al-Iqd al-Farid (Cairo, 1949) Vol. II, pp. 18—20 ; Jahiz, Kitab al-Bayan wa-Tabayyin (Cairo, 1947), Vol. II, pp. 3—5

32. Encyclopaedia of Education, Vol. III, p. 1112 ; al-Iqd al-Farid, Vol. I, p. 203.

33. Ibn Nadim, Fahrist (Cairo, 1348 A.H.) pp. 66—73.

34. Baladhuri, Ansab al-Ashraf, ed. Dr. Hamidullah (Egypt, 1959) Vol. I, p. 272.

35. Duhal Islam (Egypt, 1938) Vol. II, p. 50.

36. Jahiz, Al-Bayan, Vol. II, p. 92.

37. Al-Iqd al-Farid, Vol. I, p. 263.

38. Yaqut, Mujam al-Adibba, ed. Margoliath (Leyden, 1907) Vol. I. pp. 25-26.

39. Suyuti, Husn al-Mahadrah (Cairo, 1361), Vol. I, p. 134.

40. Yaqut, Mujam al-Adibba, Vol. IV, p. 272.

41. Ibn Qutaybah, Kitab al-Ma ' arif, p. 185.

42. Baladhuri, Futuh ... Buldan, p. 390.

43. Jahiz, al-Bayan, Vol. I, p. 92.

44. Kitab al-Aghani (Beruit, 1956) Vol. XIV, pp. 165-7 ; Vol. II, p. 222 ; Ibn Khallikan, Vol. I, 58.

45. Bukhari (Egypt, 1365) Vol. IV, p. 41 ; Ibn Hisham, Sirah, Vol. II, p. 194.

46. Ahmad Amin, Duh al-Islam, Vol. II, p. 59.

47. Ibn Nadim, Al-Fahrist, p. 340.

48. Ibn al-Ibri, Tarikh Mukhtasar al-Duwal (Beruit, 1890) p. 192.

49. *Ibid*, p. 195.

50. Ibn Sa'd, Tabaqat Kabir, Vol. II, p. 117 ; Ahmad Amin Duh al-Islam, Vol. II, p. 151.

51. Muhammad Kurd Ali, Islam-wa-Hadarat al-Arabiyah (Cairo, 1958) Vol. I, p. 136.

52. Shahrastani, Al-Milal-wa-Nahil (Egypt, 1961) Vol. I, pp. 160-7 ; Fajr al-Islam, p. 271.

53. Husn al-Mahdrah, Vol. I, p. 119 ; Ibn Abd al-Karim, Sirah Umar bin Abd al-Aziz, (Cairo, 1927) p. 295.

54. Mubarad al-Kamil, Vol. II, p. 8 ; Yaqubi, (Beruit, 1960) Vol. II, p. 278 ; Tabari, Tarikh al-Umam-wal-Maluk (Cairo, 1939), Vol. V, pp. 162-5, 182.

55. Suyuti, Tarikh al-Khulafa, p. 219 ; Baladhuri, Futuh al-Buldan, p. 193 ; al-Iqd al-Farid, Vol. II, p. 322 ; Tabari, Vol. V, p. 83.

56. Baladhuri, Futuh al-Buldan (Egypt, 1901), p. 484 ; Jirji Zaydan, Tarikh Tamaddun al-Islami (Cairo, 1958) Vol. I, p. 144 ; Suyuti, Tarikh al-Khulafa (Damascus, 1351 A.H.), p. 218 ; Tabari, Vol. V, pp. 83-4.

57. Ibn Khallikan, Wafyat al-' Ayan, (Cairo, 1290 A.H.) Vol. I, p. 220.

58. Ibn Abd al-Hakam, Sirah Umar bin abd al-Aziz, p. 95 ; Husn al-Mahadrah, Vol. I, p. 119.

59. Ibn Abd al-Bar, Jama Bayan al-Ilm (Cairo, 1937) p. 38.

60. Ibn Khallikan, Vol. I, pp. 429-30.

61. Tabaqat Kabir, Vol. V, p. 228 ; Fajr al-Islam, pp. 172-5 .

62. Kitab al-Aghani, Vol. II, pp. 122-3.

63. Ibn Sa'd, Tabaqat Kabir, Vol. V, p. 134 ; Ibn Asakir, Tarikh Kabir, Vol. IV, p. 66 ; Ibn Khallikan, Vol. II, pp. 113—119 ; Tabari, Vol. V, pp. 162-6.

64. Shaharastani, al-Milal-wa-Nahil, Vol. I, p. 161.

65. Ibn Khaldun, Muqaddimah, p. 467.

66. Jahiz, al-Bayan, Vol. I, p. 145.

67. Tabari, Vol. IV., p. 37-8.

68 Kanz al-Ummal, p. 281, quoted by Shibli, al-Faruque, p. 387.

69. Ibn Sa'd, Tabaqat Kabil, under Umar bin Abd al-Aziz ; Suyuti, Tarikh al-Khulafa, p. 244.

70. Ibn Nadim, al-Fahrist, p. 132, Fajr al-Islam, pp. 156-7.

71. Masudi, Muruj al-Dhahab (Egypt, 1948) Vol. III, pp. 39-40.

72. Jahiz, Kitab al-Bayan, Vol. I, p. 346.

73. *Ibid*, Vol. I, p. 346.

74. *Ibid*, Vol. I, 347.

75. *Ibid*, Vol. I, p. 347.

76. Fajr al-Islam, p. 161.

77. Jahiz, al-Bayan, Vol. I, 346.

78. *Ibid*, p. 347 ; Tabaqat Kabir, Vol. VII, p. 73 ; Fajr al-Islam, p. 161.

79. Al-Bayan, Vol. I, p. 347.

80. *Ibid*, Vol. I, p. 347.

81. Wahab bin Mambah was famous story teller. He had the title of 'al-Akhbari' which indicates the very function of the institution. (Ibn Khallikan, Wafyat al-'Ayan, (Egypt, 1948) Vol. V, p. 88).

82. Thomas Carlyle, On Heroes and Hero Worship, (London, 1956) p. 311.

83. Tabari, Vol. I, p. 303.

84. Fajr al-Islam, pp. 44—5.

85. Hitti, History of the Arabs, p. 93.

86. Al-Iqd al-Farid, Vol. III, p. 94 ; Hitti, History of the Arabs, p. 92.

87. Kitab al-Muhabbar, p. 26 ; Tabari, Vol. I, p. 315.

88. Ibn Asakir, *Tarikh al-Kabir*, Vol. III, pp. 104-5 ; Ibn Athir, al-Kamil, Vol. II, p. 47.

89. He was known as the poet of the Prophet of Allah. He passed sixty years during the period of 'Jahiliyah' and sixty years of Islam and thus died at the age of 120 during the reign of Muawiyah (Ibn Asakir, Tarikh al-Kabir, Vol. II, p. 125.

90. Jahiz, al-Bayan-wa-Tabayyin, Vol. II, p. 92.

91. Ibn Khallikan, Vol. III, p. 111.

92. *Ibid*, Vol. III, p. 184.

93. *Ibid*, Vol. III, pp. 317-8 ; Aghani, Vol. VII, pp. 67—100.

94. Ibn Khallikan, Vol. I, p. 286.

95. Ibn Khallikan, Vol. I, p. 287.

96. Aghani Vol. XVIII, pp. 71-2.

97. *Ibid*, Vol. VII, pp. 54-5.

THE CONCEPT OF KNOWLEDGE IN ISLAM

As the world of Islam stands on the threshold of the 15th century of the Islamic era, it has every reason to look to the future with robust faith and confidence. After a slumber of nearly two hundred years, the global Islamic community is again on the march and feels determined to demonstrate in practice the Islamic ideal way of life setting example to the rest of the world. From the shores of the Atlantic to the distant islands of the Pacific, Islam's lighthouses shine forth with greater glow. Some nine hundred million Muslims—about a quarter of total world population—now carry with a sense of pride the distinctive badge of their Islamic identity.

The resurgence of Islam is already visible in many ways and the Muslims show a new dynamism and self-confidence in responding to contemporary challenges. Islam's eternal message of peace and brotherhood on earth echoes in all the continents of the globe. That the western civilization, and the intellectual framework which is its necessary concommitant, has failed mankind is now openly admitted by the pundits of the west itself. The price the west has extracted for its ' civilization ' is incalculable in both qualitative and quantitative values and measures. The only source of an alternative civilization is of course Islam. This fact is so glaringly clear from history that it needs no agrumentation to back it.

Knowledge and Social Reality

In the present climate of academic ' learning ' one usually drives a wedge between epistemology and moral philosophy. It has become a standard practice that philosophy departments allot separate courses to epistemology and to moral philosophy. This seems to enshrine a fact/value distinction into the very structure of education. (In one course we discuss knowledge, in another values). One of the central questions of ' epistemology ' concerns the conditions under which it is possible to acquire knowledge. But the knowledge about which this question is asked is usually taken to be knowledge of facts about ' material world '. If the question is understood to include knowledge about oneself, about the Ultimate Reality, about one's society and one's relationship with others, then the Islamic contention that secularism (Scientism included) is intrinsically a mystifying social formation in which people are systematically prevented from seeing the truth about their lives, ideals and their society immediately become relevant. The question about knowledge has to be dealt with in the context of the question : what kind of society and social relations would enable a non-mystified view of reality, would replace illusion with knowledge ? This transfers the focus of the question from the individual mind to the type of society which makes knowledge possible and accessible. It also raises the question of how this knowledge enters the mind, and the relationship between the person and his knowledge ; thus it would involve issues about non-oppressive forms of education, an education which liberates people's capacities to discover and to do things for themselves and with

others which enables them to understand their society. It is a feature of the modern secular system that it cannot allow this to happen, that its nature and operation is obscure to those who work and live under it.

Thus the structure of education and knowledge reproduces the fragmentation of understanding which seems to be an essential feature of secular society. How, while remaining within the academy can we avoid being agents of this and other forms of oppression ? How can we ourselves avoid being screwed up by the false positions and compromises we are forced into ? Can we as Muslims get our own heads (and lives) straight while we are subject to its domination, to the disruption it imposes on our thinking. Should we not get out, trying to contribute to the building up of a truly and radically religious culture, living in a more integrated, humane manner ?

The present-day academic philosophy is created and transmitted in an atmos phere of so-called ' scholarly detachment '. It appears to be entirely remote from the struggles and needs of the world. Academic philosphers, both in their thought and in their lives have almost entirely withdrawn from any relationship with the concrete social reality around them. In short they seem to have abdicated from any socially valuable role, and their work consequently becomes entirely trivial and irrelevant. Though replete with technical jargon, hair-splitting distinctions and logic-chapping, modern philosophy is empty, formal and sterile. We Muslims, however, should stand for less academics and more self-understanding and concrete social change. We should liberate humanity from inhuman and enslaving philosophical presuppositions and reconstrue knowledge in the light of broad religiohumanistic framework of Islam.

Knowledge and Value

The historical roots of man's present intellectual crisis can be traced back to the Enlightenment and its successors " logical positivism ", " logical empricism " and " utilitarianism ". Our physical and spiritual crisis is a logical outcome of the worship of Reason and Scientific Fact and the divorce of values from knowledge. A new theory of knowledge, multi-dimensional and multicultural in character, which reintegrate values and knowledge calls for an alternative epistemology—the epistemology of Islam—which synthesises metaphysics with physics. This theory of knowledge will be appropriated by any one who has a new awareness concerning our needs for enlightened cosmology and ontology. Let me here give a brief historical survey of the contemporary scene.

The epistemological and intellectual tradition which is responsible for the present status of modern knowledge and science has its roots in the Enlightenment which by many is considered to be the beginning of modern times. The Enlightenment was the work of the *Philosophes*—the intellectuals who conceived and perfected it. The philosophes looked at science and exploration not just for new knowledge but also for new attitude towards knowledge. From science they acquired the sceptical attitude of systematic doubt (Descartes), and from exploration a new relativistic attitude towards belief and used them as ammunition against

traditional norms and values. Curiously, the effect of such scepticism and relativism was to glorify and magnify man in general and European man in particular.

When the Enlightenment wanted to characterize its power in one word it called it " Reason ". " Reason " became the verifying force of the eighteenth century, expressing all that it strives for and all that it achieves. The epistemological concerns of the Enlightenment derived from the seventeenth century. The intellectual spokesmen of that century—Bacon, Descartes, Hobbes, Locke, Newton—all appealed for a rational criterion of truth. The philosophy of the Enlightenment takes up this call, particularly the methodological pattern of Newtonian mechanics and begins to generalize it. This then became the basic epistemological framework of the Enlightenment. However much individual thinkers and scholars agree or disagree with the end results, they are all unified in their framework of knowledge. The new tools of " reason " and " analysis ", however, were not only for mathematical and physical knowledge but they were also used by the philosophes to dissect all branches of human endeavour. Such fundamental disciplines as metaphysics, r ligion, politics, and ethics were also analysed on the basis of reason and logic with a view to ending their perplexities once and for all. The principles which both the rational and empiricist philosophers attempted to apply were the new scientific cannons of the seventeenth century ; there was to be no a *priori* deduction from " natural " principles without concrete experimental evidence. Isaitah Berlin writes ;

> " This use of observation and experiment entailed the application of exact methods of measurement, and resulted in the linking together of many diverse phenomena under laws of great precision, generally formulated in mathematical terms. Consequently only the measurable aspects of reality were to be treated as real those susceptible to equations connecting the variations in one aspect of a phenomenon with measurable variations in other phenomenon. The whole notion of nature as compounded of irreducibly different qualities and unbridgeable ' natural ' kinds, was to be finally discarded. The Aristotelian category of final cause the explanation of phenomena in terms of the ' natural ' tendency of every object to fulfil its own inner end or purpose—which was also to be the answer to the question of why it existed, and what function it was attempting to fulfil—notions for which no experimental or observational evidence can in principle be discovered—was abandoned as unscientific, and, indeed, in the case of inanimate entities without walls or purposes, as literally unintelligible. Laws formulating regular concomitances of phenomena—the observed order and conjunctions of things and events—were sufficient, without introducing impalpable entities and forces, to describe all that is describable, and predict all that is predictable, in the universe. Space, time, mass, force, momentum, rest—the terms of mechanics—are to take the place of final causes, substantial forms, divine purpose, and other metaphysical notions ". [1]

This conviction—that reason and analysis can bring man knowledge of all reality—gained footholds in the most varied fields of eighteenth century culture. The celebrated saying of Lessing, that the real power of reason is to be found not in the possession but in the acquisition of truth, has its parallel everywhere in the intellectual history of the eighteenth century. This fundamental idea of the Enlightenment was the adhesive which united the Christians and romantic poets.

The Enlightenment separated knowledge from values without giving an adverse judgment on the either. The philosophes were in favour of reason ; but they did not throw intrinsic values overboard. Kant, for example, clearly saw in Newtonian mechanics knowledge of the law of the physical universe, but he did not submit the autonomy and sovereignty of man to deterministic mechanics. He separated the domains of physical knowledge and intrinsic values by proclaiming " the starry heavens above you and moral law within ". The Philosophies that followed the Enlightenment took the divorce of knowledge and values further.

The nineteenth century heralds the true triamphs of reason in the unparalleled spread of materialism. Logical positivism and materialism (of which Marxism is a part) and their twentieth century counterpart logical empiricism threw values overboard altogether. In their epistemological framework values are not considered proper knowledge. Utilitarianism declared that the goal, the ideal, of all moral endeavour is the greatest happiness of the greatest number of people. What came to be practised, in fact, was the greatest, number of material goods for the largest possible number of people. Industrialization, which also became the main agent of the environmental devastation, has produced this reality.

Contemporary Anglo-American linguistic and analytic philosophy is at a dead end. Its academic practitioners have all but abandoned the attempt to understand the world, let alone change it. They have turned philosophy into a narrow and specialised academic subject of little relevance or interest to anyone outside the small circle of professional work beyond the conventional sphere has been minimal. The great mass of human beings undoubtedly have real need for an enlightened philosophy that is, for a consistant world-view and a body of guiding principles and clearly defined aims. This mass is effectively deprived by contemporary philosophers of any ideological material which might prove relevant to their existences.

Bazarovism

Henryk Skolimowski[2] has aptly coined the phrase " Bazarovism " to describe the currently widespread intellectual and academic a climate. The spirit of the age is characterized by Sergei Bazarov (from Targenev's novel *Fathers and Children*) who is a robust, exuberant believer in science, in materialism, and in the world in which fact and positive knowledge are supreme values. He has no use for art, for poetry, for other ' romantic rubbish '. The modern man is engulfed so completely by the worship of reason and scientific fact and bogus empiricism that it is often difficult to see through them and assess their impact on society. According

to Skolimowski, Bazarov is at once an embodiment of the prevailing nihilism, materialism, scientism and positivism, which, in their respective ways, regarded intrinsic values as second, insignificant, or even non-existent in the world of cold facts, clinical objectivity and scientific reason.

By raising reason and fact to the level of 'Gods' we have brought ourselves into the era of supersonic age. The achievements and successes of modern science and technology no doubt have brought some benefits to humanity, but they have also brought us alienation, urbanisation, moral degeneration and ecological crisis. The worship of economic growth has brought us fragmented and meaningless work, cracked and superficial relations. The assembly line symbolize the way things should be done : rapidly, efficiently and, of course, massively. The whole society operates as a machine—including people. The vast amount of published work on philosophy and epistemology in the west is of utter worthlesseness, and I have here in mind the works published strictly within the academic nexus. Indeed, the very system of contemporary 'learning' is in its structure and method geared to anaesthetise any incoming organism that might threaten its supremacy. According to the present social culture and academic milieu, reality begins with the group, with publicly available data. The private project and inner life is denied any reality.

'Knowledge' in the Islamic Perspective

Historically speaking, philosophical thinking, epistemological doctrines included, is closely related with religious beliefs and gnostic traditions. It has often culminated in the attempt to do intellectually what religion has done practically and emotionally : to establish human life in some satisfying and meaningful relation to the universe in which man finds himself, and to get some wisdom in the conduct of human affairs.

Knowledge, according to the Quranic doctrine, is both a gift of Divine revelation as well as a creative element or aspect of the human spirit. Most of recent philosophy threatens our spiritual existence and freedom by driving the contemporary mind into irrational and compulsive negation of religious truth. Islam, however, is a faith that is reasonable and rational, a faith that we can adopt with intellectual integrity and ethical conviction.

Philosophy, with all its variegated disciplines, in the framework of Islam cannot be squared with an antiactvist or 'spectator' view of it which aims merely at an enlargement of the understanding. Indeed it here becomes an essentially practical subject : it seeks to get people to do things. It cannot remain uncommitted to social action. The attack on spectatorism which we find in Existentialism and in the pragmatists is very relevant to current philosophical scene. Moreover, Anglo-American academic philosophy is presently built around the assumption that its true centre is epistemology. This assumption is apparent particularly in the structure and content of university courses. The approach to the various areas of philosophy *via* the problem of knowledge is one possible way of organizing one's

conception of philosophy. But the outcome has been the abstraction of ' man as Knower ' from the rest of human life, and in particular from human practice. This has been a distinguishing feature of the empiricist tradition—and epistemology is still dominated by that tradition : the so-called ' problems of knowledge ' are the problems of the isolated individual knower confined to the world of his own sense-perceptions.[3] Conversly it is essential to *see* the activity of ' knowing ' as arising out of, and part of, man's general attempt to organize and cope with his world, in order to vindicate the status of human knowledge as a meaningful totality rather than a series of discrete sense-impressions.

It is Ludwig Wittgenstein, the venerated philosopher of the later half of this century, who has said :

" Even if every possible scientific question were answered, the problems of our living would still not have been touched at all ".

What are the real problems of or living to which Wittgenstein is referring? I am sure that he and his acolytes know it very well that these pertain to the meaning and value of human existence and his ultimate destiny.[4] All human beings worth the name feel that life must have a meaning—but what is it ? Do they find it in the contradictions, double talk, and cynical resignation they encounter at every turn? They long for happiness, for truth, for justice, for love, for an object of devotion. Are the modern academics able to satisfy their longing ?

According to Islamic doctrine, no one is born with knowledge ; however, everyone is born with a greater capacity to acquire knowledge. We read in the Quran :

' It is He who brought you forth from the wombs of your mothers. You did not know a thing ; and he gave you hearing, sight and minds in order that you may give thanks. (al-Nahl 16 : 77).

This Quranic verse amply shows that in Islam great emphasis is laid on empirical investigation and observation and it in this sense that Allama Mohammad Iqbal rightly asserts that Islamic civilization represents the advent of inductive intellect [5]. The knowledge of physical world is attained through ' hearing, sight and minds. However, the aim of such knowledge is to produce appreciation of Allah's attributes of creativity, power and wisdom, and to discharge man's duty as His vicegerent on earth with humility :—

' Indeed, in the creation of the heavens and the earth and the alternation of night and day, there are sings for men of understanding. Those who remember Allah standing, sitting, and reclining on their sides and contemplate (the wonders) in the creation of the heavens and the earth. '. (al-Imran 3 : 191).

' Only the learned among His people truly fear Allah ' (Fatir 35 : 28).

Scientific knowledge directed toward the glorification of man leads man to his ow n destruction in this world as well as in the Hereafter. The Quran relates the story of Quran explaining this point :

> " He (Quran) said, ' This has been given to me because of a certain knowledge which I have.' Did he not know that Allah had destroyed before him generations which were superior to him in strength and greater in number ? " (Al-Qasas 28 : 78).

The only authentic source of knowledge concerning the Unseen realities is the Quran, the final and most perfect from of Divine guidance. Speculation, philosophical theories, and man-made theologies or ' isms ' do not constitute true knowledge. Islam is not against rational speculation. But it does not grant authority to such speculation. The ultimate source of knowledge is the Quran and the Holy Prophets ' *sunnah*. Allah gives examples of such humans speculations and surmises in order to reject them. For example, He say :

> " And they say, ' What is there except out earthly life ? We shall die and we live, and nothing destroys us except time.' But of that they have no knowledge ; they merely speculate '. (al-Jathivah 45 : 24).

> " But most of them follow nothing but conjecture ; indeed, conjecture is of no consequence against the truth ; Verily, Allah is well aware of what they do. This Quran cannot be produced by other than Allah ; but it is a confirmation of (revelations) that went before it and a fuller explanation of the Book—wherein there is no doubt—from the Loard of the world " (Yunus 10 : 37).

A person's faith must be based on knowledge. As Jung has acutely remarked, ' The modern man abhors dogmatic postulates taken on faith and the reli˛ious philosophies based upon them. He holds them valid only in so far as their knowledge—content seems to accord with his own experience of the deeps of of psychic life. He wants to know—to experience for himself ' '. To be sure, Islamic faith is not a blind faith, wherby one is asked to believe in something which is either a contradiction, such as ' One-in-three and three-in-one ' or if not a contradiction, so remote from reason that one has to twist his logic to bring him to say, ' I beileve '. An example of this is the theory of reincarnation, in which a man's actions are judged by none (as there is no God) so that this none decides in that from to send him back to earth after his death. The faith in Islam, on the contrary, has to be sustained by metaphysical knowledge and enquiry. The worlds of reason and of religion do not turn in different orbits. The Real is to be known through reflection or ' tafaqquh ' in Quranic terminology. The intellectual approach to the knowledge of supreme reality is insisted in Islamic thought. We have to think out the metaphysical presupositions and attain personal experience of the religious verities, from which alone the truly authenitc and living .aith starts.

Let me now dwell upon a few basic quranic expressions which provide a clue to the understanding of essentially Islamic theory of Knowledge.

'Tazakkur' Recalling the Fundamental Truths Intuitively

'Tazakkur' is a very significant Quranic term which means recalling to mind the fundamental truths intuitively recognized by human nature. For understanding the significance of this term we have to note that the Quran frequently calls itself 'Zikr', 'Zikra', Tazkir'—derivatives of the same root from which 'Tazakkur' stems. In essence, 'Tazakkur' pertains to the first stage in the comprehension of divine realities and meanings. It also alludes to the truth that the Quranic teaching is not extraneous to the human nature. It actually reflects the experiences of man's inner self and it is meant to awaken reminiscences of something already apprehended rather than to import anything altogether new. The Holy Quran appeals to all thoughtful persons whom it address as 'Ulul albab' (men of understanding) and 'Qaum-an-Yaqilun' (people who have comprehension and insight) to think and ponder over the outer universe of the matter as well as the inner universe of the spirit, as both are replete with the unmistakable signs of the Almightly Creator. Simultaneously, it invites them to deliberate over its own signs, *i.e.*, its divinely inspired verses.[7] Thus the Quran, in addition to its own verses, regards both 'anfus' (self) and 'afaq' (world) as sources of knowledge. Pondering over the three categories of si ns, a man will be able to perceive a perfect concord between them ; and, with the realization of this concord, he will grasp certain fundamental truths which are borne by the internal testimony of his own nature. So to say, the truths cherished by his inner self will emerge from its depths and shine in all their brilliance on the screen of his consciousness. In other words, full and intense awareness of Absolute Reality will spring up to his consciousness like the memory of a forgotten thing shooting up from the dark depths of the psyche to the surface of mind with the aid of a pertinent su gestion.

The Quran thus declares in unequivocal ters that every man can derive the benefit of 'tazakkur' from it. It does not matter if a person's intelligence is limited, and his knowledge of logic and philosophy is poor ; and if he has no fine sense of language and literature. In spite of these drawbacks, he can develop an inkling and appreciation of ultimate truths if he has a noble heart, a sound mind, and an untainted nature not perverted by any kind of crookedness. The central themes and basic subjects of the Divine Book are nothing new or unfamiliar to the true human nature. While reading it a man often feels as if he were listening to the echoes of his inner self. In this sense, the Quranic theory of knowledge subtly resembles the Platonic theory in which true knowledge is also attained through recolle.ing forgotten memories of eternal forms.

'Tadabbur' Intellection and Reflection

The Holy Quran Urges us again and again to study it intelligently and with deliberation, bringing our thought to bear upon it, and exercising our reasoning faculty in following its arguments and comprehending its meaning. For this purpose it uses the location 'Tadabbur' and its cognates, 'fahm' 'aql'' fiqha' and 'fikr'. 'Tadabbur' generally means pondering and reflecting over the meaning and significance of ultimate questions. Specifically in the Quranic context,

it connotes diving deep into the fathomless ocean of Divine wisdom. We learn from authentic traditions that the companions of the Holy Prophet used to reflect and ponder over the different surahs of the Quran for years on end.

This brings us to the question as to what reason, reflection and ratiocination (or rationalism) mean in the Islamic perspective. Of course, one must distinguish between the use of reason and rational faculty, and rationalism which makes reason the sole source of gaining knowledge and the only criterion for judging the truth. One does sometime speak of Aritotalian rationalism, although in the philosophy of Aristotle there are metaphysical intuitions which cannot be reduce to simple products of the human reason or logical understanding. Most regrettably, the meanings of many words like thought, reason, reflection and others have shrunken tremendously in contemporary philosophy, with the result that the suggested association of ideas have become quite restrictive.

In the human microcosm, intellect is the deep spiritual centre or being, and not merely any specifiable mental faculty. It is necessary to distinguish between rational thought which is discursive and proceeds from the mental faculty alone ; and intellective thought which proceeds from intuition and pure Intellect. The arabic counter part of reason or intellect—' aql '—signifies etymologically both that which binds or limits the absolute in the direction of creation and also that which binds man to the truth, to God Himself. In this sense, the word ' aql ' is at once *intellectue* or *nous* and *ratio* or reason. In the Islamic perspective it is precisely ' aql ' which keeps man on the straight path and prevents him from going astray. The sense of the numinous cannot be excluded from the world of empiricism. Experience is not exclusively what comes through science and scientific method. In other words, a distinction has to be made between terrestrial thought, aroused by the environment and celestial thought aroused by that which is our true being and finding its term beyond ourselves and, in the final analysis, in God.[8] Reason, in the present day limited sense, is something like a profane intelligence ; essentially the profane point of view springs from there. It is necessary for reason to be determined, transfigured or enriched both by faith and gnosis which is the quintessence of faith. Gnosis, in the Islamic theory of knowledge, keeps its original meaning of wisdom made up of knowledge and spiritual sanctity. It is the higher type of knowledge which comes of intuition by the intellect, the term intellect having the same sense as in Plotinus or Eckhart. If human intellect ' aql ' is obscured by the passions by the *nafs* then it can become the veil that hides man from the Divine. Were it not to be so, there would be no need of revelation at all.

6 ' Love ' —Mystic unitive apprehension

There is intellectually nothing more depressing than to read the trivial writings of the linguistic philosophers and the existentially barren texts of the social theorists. The Islamically—oriented epistemological theory, on the contrary, represents a deep-knowledge process which transforms the seeker. Here the idea of knowledge being an ideational process is not even considered. The foundations of

knowledge are only accessible to the one who is prepared to undergo a profound existential transformation. The Islamic approach to knowledge involves an operational zone taking in the whole life-pattern of the student.

According to Islamic epistemic theory, the sole element that can unite the soul to God is love, for love alone is desire of possession or of union ; while discursive knowledge appears as a static element having no operative or unitive virtue. For securing a complete vision of Reality, therefore, sense perception must be supplemented by the function of what the Quran describes as '*fuad*' or '*qalb*' *i.e.*, heart. 'Love' is held to include all modes of spiritual union, an eminently concrete participation in the transcendent realities. Intellect, divorced from Love, is a rebel (like Satan) while intellect wedded to Love has divine attributes. But surely 'loving' God presupposes being conscious of God. To be conscious of Him is to fix the heart in the Real, in permanent remembering of the Divine. 'Remembering' or *dhikr* must be understood as referreing essentially to an aspiration of the being towards the Universal with the object of obtaining an inner illumination. Heart, in Quranic epistemology is symbolically the seat of the true self, of which we may be conscious or ignorant, but which is our true existential, intellectual and so universal centre. The heart is as it were immersed in the immutability of Being. Contemplativity is here stressed more than the sharpness of intelligence. In contemplation of the heart things appear in their metaphysical transparency. The role of love is also emphasised in Christian philosophy. For example, Paul Tillich writes, 'Full knowledge does not admit a difference between itself and love, or between theory and practice'.[9]

Thus knowledge infused with intuition and love gives celestical and divine knowledge. Love acts as the purgative that effects the perfection of soul by purging it of all spurious matter accumulated by intellect. The practical explanation of love is also contained in Allama Iqbal's philosophy of Self. In a systematized exposition of it in the letter sent by Iqbal to Dr. Nicholson and incorporated in his introduction to *the Secrets of the Self*, the English translation of Iqbal's Asrar-i-Khudi, he says about love :

> "the word is used in a very wide sense and means the desire to assimilate, to absorb. Its highest form is the creation of values and ideas, and the endeavour to realize them. Love individualizes the lover as well as the beloved".

The reason why in Islamic epistemological framework so much emphasis is laid on love or intuition is that intuition catches the glimpses of the ultimate reality while intellect fails to achieve that goal on account of its inherent imperfection. Love, in short, is able to know the unknowable.

To conclude, the various components of Islamic epistemology I have outlined are mutually supporting and interdependent. Islamic theory of knowledge, updated in idiom, sweeps away the contemporary western state of confused affairs in no uncertain manner. It recomposes man's divided self and restores his sanity

because it restores the unity of knolwedge Value and wisdom. It infuses in us the realization that the state of our knowledge is an important characteristic of the state of our being. It teaches one to be logical, rational and scientific without losing sight of the spiritual verities known through prophetic revelation, love and institution. I have not loaded the essay with much technical detail but nevertheless tried to give a fairly intelligible account of the conception of knowledge in Islam in the context of present philosophical scene.

FOOT NOTES

1. Isaiah Berlin, The Age of Englishment, Mantor Books, New York, 1956, p. 17.
2. Ecology. p. 5, 18 January, 1975.
3. This contention is borne out by a study of contemporary philosophical treetises of Russell, Ayer, Ryle, Homlyn and many others.
4. A spoat of articles published in journals and books by philosophers like kurt Baier, Ronald W. Hepburn, Antony Flew, Ilham Dilman, among others, prove my point beyond any shadow of doubt.
5. Dr. Muhammad Iqbal. Reconstruction of Religions Thought in Islam, Lahore (Pakistan). p. 127, passim.
6. C.G. Jung ; Modern Man in Search of a Soul, Routcledge and Kegan Paul, London p. 163.
7. It is noteworthy here that the Quran calls its verses ' ayat ' *i.e.* Signs (of God). These verses are considered as signs of God—as important as any other of His signs in the universe or in the heart of man. It is because the Quranic verses are parts of Kalamullah (God' speech) and also, because, like oher signs of Gcd, they, too, turn man's mind to the Almighty.
8. I owe this very relevant and illuminating distinction to F. Schuon. Of his book *Gnossis, The divine Wisdom*, London, pp. 78—90, and *Spiritual Perspectives and Human Facts*, London, 1953, p. 54.
9. Paul Tillich, *The Shaking of the Foundations*, Penguin Books, 1966, p. 115.

FUNCTION OF MUSLIM PHILOSOPHY

A NEW PERSPECTIVE

Traditional muslim philosophy had its inception in an atmosphere which was thoroughly charged with Greek ideas. These ideas were then being officially introduced into the muslim culture through translations, commentaries and so on at such a repid pace and such a large scale that no one could fail to be influenced by them. The muslim philosophers—Farabi, Ibn Sina, Ibn Rushd among them—were awed by the Greek world-view so transmitted to them and they tried, in general, to reconcile it with the principles and doctrines of Islam. They also referred to the methods of observation and reasoning which are duly recommended, rather enjoined, by the Quran. So, they argued, if the Greeks had used logic and reasoning to solve the problems of life and existence, there was nothing un-Islamic about it. On the other hand, Ghazali, Ibn Taimiyya and others revolted against various aspects of Greek Philosophy and also built up a reasoned-out position regarding their own points of view. Anyway, in both these cases the context was the same, whether the muslim philosophers were positively or negatively oriented towards it.

Relevant to modern times, Sir Sayyid Ahmad Khan's philosophy is an attempt in the same direction. He said that just as the learned people of the earliest Islam had tried to reconcile orthodoxy with Greek philosophy, "in the present age we are in need of a modern *ilm al-kalam* by which we may either refute the doctrines of modern sciences or declare them to be doubtful or show that the articles of Islamic faith are in conformity with them....Those who are capable of the job but do not actually try their utmost......are sinners all of them, surely and definitely......'There is none at present', he admits, 'who is aware of modern science and philosophy and (in spite of this awareness) does not entertain in his heart of hearts doubts about the doctrines of Islam which are today accepted as such......though I am equally sure that it will not, in the least, affect the original, glory of Islam[1]".

Thus, according to Sir Sayyid Ahmad Khan, essential principles of Islam contained in the Quran are in conformity with the conclusions of natural sciences. Physical universe is the work of God, according to him, whereas the Quran is the word of God. So, how can there be a contradiction between the two. "Islam is nature and nature is Islam[2]", he succinctly remarked. God is Himself a naturalist : He can enact any laws of nature. He likes but once they are so enacted, even He cannot violate them. Under the aegis of these observations, he built up a comprehensive philosophy of religion explaining awayt he phenomena of miracles, prayers, sufistic illuminations, prophetic visions and so on.

The thought of Sir Sayyid Ahmad Khan is important because it has prefaced a whole chain of religio-philosophical thinkers, specially in the Indo-Pakistan subcontinent, who, during the 20th century continued interpreting Islam, consciously

or unconsciously, in such a way that stood reconciled with the current scientific thinking. Allama Mohammad Iqbal, Khalifa Abdul Hakim, Allama Inayat ullah Mashriqi, Ghulam Jilani Barq, Ghulam Ahmad Pervez have all reacted more or less positively to sciences.

Now , basically there is nothing wrong in this kind of thinking. After all one cannot help inhaling his own climate of opinion. Prevailing situation is a reality that is always to be seriously reckoned with. For that matter muslim philosophers of to-day are justifiably bringing out the veracity of the religious phenomenon against attacks from certain contemporary movements in Philosophy like atheistic existentialism, logical positivism, medical materialism, psycho-analysis and so on. Arguments are to be countered with arguments. Logic must be met with logic. It was this requirement, we remember that had compelled Asharite theologians very early in Islamic history to reason out their standpoint in spite of a strong opposition by the orthodox who regarded argumentation in religious matters as an innovation and a heresy.

Anyhow, there is one essential aspect of the function of muslim philosophy that has not been adequately recognized so far. Muslim philosophers have been, we know, muslims first and philosophers later on. They professed the Islamic 'point of view' with which they looked at the contemporary thought fashions and either accepted or rejected them. But what they failed to analyse was the 'point of view' itself. With only a rudimentary and vague concept of the meaning of the Quranic propositions, philosophers—with very few honourable exceptions—are generally found rushing forth to give a judgement as to whether a particular idea is, or is not, in accordance with the will of the Quran. We seldom find a realization that before reacting to the 'climate of opinion' to which he belongs, he must have a thorough understanding of his 'local weather' *i.e.* his attitude which comprises the teachings of the Quran. In other words, the meaning of the language of the Quran is to be clearly understood. This specifically is the function that is thus naturally to be recommended for all muslim philosophers so that clarity on the basic issue having been attained muslim philosophy could develop as an organised, well-grounded school of thought.

Incidentally, it may be objected that the concepts of 'muslim philosophy' and 'Islamic philosophy' have been confused here whereas they are in fact the appellations of two distinct states of affairs. It is generally observed that properly it is the characteristic function of Islamic philosophy to understand and interpret the meaning of the Quran and to translate its metaphysics in the language which the contemporary man understands. Muslim philosophy, on the other hand, would comprise the philosophical speculations of one who is a muslim by convention : these speculations themselves might as well justifiably be nihilistic and un-Islamic in character. This distinction, however, does not appear to be valid. Muslim philosophy, in general, cannot possibly afford to be un-Islamic. If, in a particular case, it actually happens to be un-Islamic, you may call it the philosophy of this or that particular person or even, if you like, the philosophy of this or that

particular muslim. It will not be muslim philosophy, absolutely speaking. Actually, the distinction between the two concepts is only that of relative emphasis. In Islamic philosophy the emphasis is on Islam while philosophy is secondary in significance, meaning only a sort of rational understanding. In muslim philosophy it is the characteristic terminology of philosophy and its idiom in vogue at a particular period in history that is visibly the dominant factor because it is in that terminology that the meaning of the Quran is to be expressed. It is very much due to all this that the problem of the reconciliation between philosophy and religion is a problem of muslim philosophy rather than of Islamic philosophy.

Anyway, coming back to the problem of the meaning of the Quranic language, it is illustrative to refer to a distinction drawn by philosophers of language between primary and secondary meanings of words. Primary meaning of a word is its literal meaning, its lexical or reportive definition Secondary meanings, on the other hand, are the various shades of significance of a word that it acquires during its actual usage in situations of diverse characters. This is in fact the economy measure woven into the very nature of language so that a separate word need not be coined for every individual situation that one encounters. The Quran makes a corresponding distinction between the *muhkamat* and the *mutashabihat* among its verses[3]. The former are the basic and fundamental ones to the overall objectives of the Quran. Being thus of primary importance, Their meanings are fixed and determined and the same everywhere and always. The latter on that account are secondary in significance. They are amenable to various interpretations in accordance with differing environmental situations, needs of people and even levels of human intellect and understanding. Being allegorical, they have many layers of meaning at least one of which must be relevant to a particular spatio-temporal context. They thus ensure, as was rightly emphasized by Sir Sayyid Ahmad Khan, that the Quran is a book of guidance for everyone and for all times to come.

Now, how to interpret the allegorical verses which essentially relate to the metaphysics of the Quran. It may here be pointed out that there is a paradox inherent in the language of the Quranic text. It is a common belief that the Quran is literally the word of God : it is God's speech. After having sent down His speech, He has taken upon Himself to preserve its originality and save every syllable of it from any possible human interference and corruption[4]. On the other hand, it is also a plain fact that it is couched in a language which is man's own, conventionally speaking. It is the language that the Arabs had developed over a period of time. Those thinkers who have exclusively stressed the latter position have been encouraged to understand the whole Quran literally *i.e.* in the sense in which we human beings normally understand the meanings of words and propositions. For instance, God is described as hearing, moving, sitting on the throne, having eyes, a face and so on. These attributes of God were accepted by them almost exactly in the same way in which they are employed as regards human beings. Similarly, angles for them were creatures with wings who flow here and there, sometimes assuming a human form. Heaven and heal were localities with

all the actual paraphernalia ascribed to them in the Quran. And so on. These thinkers were the *mujassimah*, the anthropomorphists. Their intentions were by and large, sincere : They wanted in their own way to remain closest to the word of God. However, observed closely, this approach has never fitted in well with the requirements of a theistic religion and has invariably led to linguistic confusions. For example, a man is called good and it is meant that he submits to the moral law or that he resists temptations etc. When this epithet with these conventional meanings is applied to God, we immediately observe the oddities involved in our position. A God who is required to obey an alien moral law or who may harbour evil intentions is not at all the supreme God of Islam who deserves our unqualified obedience and who is the grand ideal of all moral and spiritual endeavours. God is unique ; so all His attributes are singular and have no proportion to the apparently corresponding human attributes.

Those philosophers, on the other hand, who have laid emphasis on the essentially divine character of the Quranic language are of the opinion that religious symbols are totally unmeaning marks insofar as ordinary human comprehension is concerned : they have no cognitive content at all. It is observed that religious statements are not statements worth the name because they do not mark out any one state of affairs. They are taken by the religious man to be compatible with any and every situation. Specifically, our knowledge of objects and events has nothing to do with our knowledge of God's character. For instance when we see floods playing have with the lives of people or innocent persons dying in accidents or small children being snatched away by death from their parents, we still tenaciously hold on to the assertion that God is kind, loving and so on. John wisdom has related a story in this regard . [5] : Once upon a time two explorers during one of their journeys came across a clearing in a jungle. In this clearing many flowers and weeds were growing. One explorer said, ' some gardener must tend this plot ' The other disagreed, ' There is no gardener '. So they pitched their tents and began to watch. No gardener was ever seen. ' But perhaps he is an invisible gardener'. So they installed a barbed wire fence and also electrified it. They patrolled around it with bloodhounds. But no shrieks ever suggested that some intruder had received a shock. No movement of the wire ever signified that there was an invisible climber. The bloodhounds too never cried, The beliver was still not convinced. ' But there is a gardener invisible, intangible, insensible to electric shocks, a gardener who has no scent and makes no sound, a gardener who comes secretly to look after the garden which he loves. At last the sceptic said in despair : 'But what remains of your original assertion ? Just how does what you call an invisible, intangible, eternally elusive gardener differ from an imaginary gardener or even from no gardener at all ?'.

Substituting God for gardener, the above is the celebrated ' argument from falsification' against the reportive and descriptive character of religious propositions. This argument has been criticized on many counts. Here we may simply point out that assertion of a proposition and the falsification of its opposite cease to be

complementary to each other specially when we are dealing with two different levels of existence. When we assert the attributes of God, we are describing a transcendental reality and out language is symbolic but when we have to deny the opposites of these attributes we are dealing with the world of our normal experience and our language is literal. The words that we use in both these cases may be the same but still their meanings are widely different because of the different universes of discourse to which they belong. Hence no comparison can be made between them nor can they stand at par with each other. In fact to a layman or even to a muslim philosopher for whom faith in God is extremely relevant to everyday life and for whom the Quran is a book of guidance in all departments of life, such a dissociation of normal 'experience from the Quranic metaphysics is simply unthinkable.

We have explained two extreme points of view regarding the meaning of religious language and have seen reasons to reject the claim of each one of them to exclusive truth. However, as both do have some elements of truth in them, the correct state of affairs must lie somewhere between them. The muslim philosopher should set before himself the task of determining and delineating that middling state of affairs. He must search out the meaning of religious language which takes care of its divine origin as well as its human context. How is this to be done ? How and at what platform is a meeting between man and God to be arranged ? The way usually recommended in this connection and unwarily followed by layment is the mentod of analogy. To understand what analogy is let's take the word 'healthy'. Normally this characteristic is attributed to an organism. But then we also say about a complexion that it is healthy or that a particular drink is healthy and so on. This is argument by analogy. An organism, a complexion, a drink—all are healthy, not exactly in the same sense and not in absolutely different senses. Each one is healthy but so only according to its own specific nature. On this pattern, when we say about God that He is knowing, powerful, kind, just, that he sees, hears and so on, we understand these attributes on the analogy of the apparently same attributes in human beings. Man possesses them according to his nature and God would possess them according to His own nature. But what God's nature is we don't know. It is obvious that unless we already know it to some extent analogy cannot operate fruitfully and we cannot properly know God. So the entire reasoning is misleading. Analogy is tolerably effective as long as all the analogates belong to the sensible nature. But the moment we talk about the supersensible realm we are involved in a circle. In order to know God we use analogy and for the use of analogy itself we must already know God's nature. If, on the other hand, for a moment we do not take into account this 'unknown nature of God', the reasoning ultimately results into a position which is not very different from anthropomorphism.

It is due to these difficulties that some philosophers of religion have instead recommended, what they call, analogy of grace. According to this kind of analogy it is the characteristics of God that are antologically first ; their human analogues are derivative and secondary. It is by virtue of the grace of God that a community

s established between Himself and man so as to make it possible for us to talk of Him in human terms. We cannot possibly talk about God in divine language, but He can stoop down if He so chooses to communicate with us in our language. " If ' for instance, ' we do know about God as the creator, it is neither wholly nor partially because we have a prior knowledge of something which resembles creation. It is only because it has been given to us by God's revelation to know Him, and what we previously thought we knew about originators and causes is called in question, turned around and transformed [6]. Even the consciousness of my own existence presupposes the being of God. " Only by meeting a Thou ', says Paul Tillich, ' does man realize that he is an ego ".[7] In the religious literature of Islam, taufiq of God is pretty equivalent to the grace of God mentioned here. Ghazali calls it *nur-i-ilahi* ' This (*i.e.* the truth) did not come about by systematic demonstration or marshalled argument ', he says in his antobiography *Al-munqiz min al-dalal,* ' but by a light which God, Most High, cast into my breast. That light is the key to the greater part of knowledge. Whoever thinks that the understanding of things. Divine rests upon strict proof has in his thought narrowed down the wideness of God's mercy '[8].

In order to receive the grace or the light of God it is necessarily required that we establish a direct personal encounter with Him. By virtue of this, one is ultimately steeped in divinity so as to be able to look at everything, including the language of the Quran, with divine effulgence and thus discover the true significance of His revelations. Cononical prayer which is an effective instrument of encounter has been given very great importance among the duties enjoined by the Islamic *Shariah*. The Holy Prophet (may peace be upon him) is reported to have called it spiritual ascension for the believers. Anyhow, there is no one special way for the eventualization of this encounter. A mystic who struggles hard to realize his own I-amness, a natural scientist who gets involved in the study of the physical universe, a historian who tries to discover the principles of the rise and fall of nations, a moralist who is in search of higher and higher ideals involved in human nature and so on—all are equally legitimate candidates for a meeting with God provided they are honest in their intentions, sincere in their efforts and strongly committed to a faith that this world is not the be-all and end-all of everything and that there is a supersensuous and supernatural reality beyond it. According to the verdict of the Quran itself, the signs of God are spread everywhere in the universe. " And Allah's is the East and the West, so whithersoever you turn, thither is Allah's face "[9].

NOTES

1. Quoted by Altaf Hussain Hali, Hayat-i-Javed, pp. 274-275.
2. الاسلام هوالفطرة و الفطرة هى الاسلام
. This is the title of an essay by Sir Sayyid Ahmad Khan, Maqalat, Vol. 3, p. 16.
4. See the Quran, 3 : 7.
5. The Quran, 15 : 9.

5. George L. Abernethy oand Thomas A. Langfords (eds) ; Philosophy of Religion, essay on 'Gods' by John Wisdom pp. 340—349.

6. Quoted from Barth by John Mcquarrie : Twentieth Century Religious Thought, p. 323.

7. Quoted by Naheed Qutab : Philosophy of Prayer (an unpublished M.A. Thesis) p. 35.

8. W. Montgomery Watt : Faith and Practice of al-Ghazali p. 25.

9. The Quran, 2 : 115.

MOSQUE AS A CENTRE OF EDUCATION IN THE EARLY MIDDLE AGES

The Arabs from the very beginning of Islam took interest in the philosophy, subject and method of education and tried to solve their problems and later started writing books on it. Arabic Pedagogical literature is very rich. There are about four dozen works on Arabic education alone dealing with teachers, students, their students, their relations and subject and method of studies but most of them are still in manuscript forms. The earliest work *Kitab al-Mu'allim* (the Book of Teachers) was written by al-Jahiz in 258H/99 869 A.D. as mentioned by Yaqut. [1]The *Fatih al-'ulum* of al-Ghazzali dated 505H/1111 A.D. and published in Cairo at al-Husainiyah Press in 1322 A.H. is the best of all these works on education known so far. There is originality in materials and assessment, which are lacking in the writings of the later authors. Next to it comes in order of merit the *Talim al-Mutallim* (Student's education) composed after 593/1197 by Burhan-al-Din Zarnuji who flourished about 620/1223 though it also lacks originality and suffers from the general defect of oriental writings *e.g.* repetition and plagiarism and overemphasises non-essentials in education. It is important to note that every much technical educational matter was taken up by the Muslims as early as the 10th and 11th centuries covering questions of sharp memory, short memory, proper time of study, teachers' salary, students' fees, aim and object to education, course of studies, relations of teachers and taught and other phases of school life.

The subject being popular has been widely written upon but a systematic analysis of the same has been rarely made. Here an attempt is being made to discuss the organ of instruction followed in mosques in the early middle ages, the details of which may be had from the biographies and autobiographies of scholars like Yaqut, 'Abdu'l Latif, al-Maqrizi (date 27th Ramadan 845/February 9, 1442), Qadi Abu Bakr ibn al-'Arabi and Ibn Khalidun (1332-March, 1406). If they are critically analysed, the biographical works of Ibn Khallikan (d. 1282 A.D.), Nawawi[2] (d. 1278 A.D.), Dhahabi (1274-1348 A.D.), Ibn al-Faradi (d. 1013 A.D.), Ibn Bashkuwal (d. 1183 A.D.), al-Dabbi (d. 1203 A.D.), Ibn al-Abbar (d. 1260) and and others are rich in such materials.

In the simple structure of *Masjid al-Nabwi* at Madinah Sharif built adjacent to the house of Abu Ayyub Ansari (d. 52/672) there was at one end a covered platform called *suffah* which had been reserved for a seminary and dwelling for those Makkan homeless and unattached *Muhajirun* (*emigres*) who dedicated themselves to the study of religion[3]' They were joined by later converts who had no family. They become known as *sshab al-Suffah* (the dwellers in a covered gallery of court-yard) and in time became religious preaches who spread Islam in and outside Arabia[4]. After the battle of Badr several Quraish prisoners had to teach each twelve boys of Madinah to write as a ransom for his release. In 17H/638 A.D. the teachers of the Qura'n were sent by the second Caliph Hazrat 'Umar (R.A.) in directions of teach the Holy Book, the system of prayer and other religious events including usages, washings and ablutions to the people who were asked

by the caliph to attend prayers in the Mosque. The Caliph further counselled parents to teach their children swimming, dart throwing, riding horses and reciting verses.[6] Great emphasis was laid on the teaching of swimming and writing[7].

From the *Hadith* we learn the mode of learning practised in the mosque. The Prophet Muhammad (be peace of God upon him) himself if represented as sitting in the *Masjid al Nabwi* encircled (*halqah*) by listeners who repeated his words thrice in order to memorise them and sought explanations from him of this and that *hadith*. Even during the time of the Prophet there were other eight mosques in Madinah which served the purpose of schools. Sometimes the Prophet himself supervised the teaching in order to put it right. Thus within 23 years of his prophethood he made Arabia a great centre of educational activities. According to a *Hadith*, " To acquire learning is obligatory on every Muslim, man and woman[8] " and another, " a father can confer upon child no more valuable gift than a good education "[9].

The learning by heart and understanding the Quaranic verses was the starting point and next came the study of the *Hadith*. The scientific study began with the collection and arrangements of *Hadith*. On matters of belief and conduct the Prophet was often consulted by his followers (*ummah*) and after his demise his companions tried to solve the problem by citing and explaining the relevant *Hadith*.

Unlike temples, synagogues and churches, the prayer halls of the followers of other religions, the Mosque of the Muslims is more than a prayer hall. Its purpose is manifold. In Islam religion and politics are inseparable, the mosque was, therefore, the centre of gravity for both politics and religion. It was a place of public administration and a court of justice as well. Although the actual government was early transferred to a *Diwan* and *Qasr al-Imarah*, the financial transactions were carried on in a public meeting held in the mosque. Even after 300 H/912 A.D. the director of finance namely Abu Bakr al-Madhari used to sit in the Mosque of ' Amr at Fustat in Egypt to supervise the auction of the farming out of the domains. As early as 97 and 99 H/715 and 717 A.D. ' Uthamah bin Zaid who had led the Syrian expedition under Caliph Abu Bakr (R.A.) in 632 A.D. while posted as the director of finance in al-Fustat built a *qubbah* on pillars in front of the *minbar* (pulpit) of the Mosque of Amr for the *Bait al-Mal* of Egypt. Prophet Muhammad used to settle all legal questions in the Mosque. It is evident from the *Hadith* that some *qadis* sat by the side of the mimbar and others on the open square inside the mosque area to deliver justice. As late as 132 H/749 A.D. the Qadi of Madinah administered ustice in the Mosque of the Prophet. But holiest purpose of the Mosque beside the prayer was to impart education as learning stands even higher than blind piety.

The early Muslim educational institutions were divided into two groups : elementary (*Maktab*) and higher (*Madrasah*) both were generally located in the Mosque before the establishment of the State organised *Madrasahs* like *Nizami* v

in the 5th H/11th century A.D. The earlier institutions of *Bait al-Hikmah* established at Baghdad by Ma'mun in 215 H/830 A.D. and *Darul Hikamah* at al-Qahirah (Cairo) by the Fatimid caliph al-Hakim in 395 H/1005 A.D. were centres of research, discussions and debates. The entire education system was built upon purely voluntary basis. There was freedom of teaching and studies but State interfered only if they were against religion and orthodoxy and a regular attendance was insisted upon by *Mu'allims* (teachers) and guardians. The spiritual power which the *Qura'n* exercised over the Muslims led them on to a desire to read and to teach it.

Elementary education was also imparted at home by the parents or in the houses and shops of the teachers. Abu-Muslim (d. 754 A.D.), founder of the Abbasid rule, attended a boy school in Khurasan and Sultan Salahuddin Ayyubi (d. 3rd March, 1193) taught his children with an *aqidat* (catechism) a book in question and answer form, in his hand.

At the age of six or seven year children were sent to *Maktab*, boys and girls attending the same together at their tender age and if the teacher was paid by the community his classes were open to the orphans and even to the slaves.[10]. Keeping in view the sanctity of the Mosque the children were not given seats in the main prayer hall but were preferred to be accommodated in the verandah or open courtyard (*sahan*) or by constructing additional rooms attached even to a village mosque. This is the main reason why the structure of a mosque is different from that of a church, synagogue and temple in shape and size.

In many mosques there were various halls and annexes to serve the purpose of school. In the Mosque of the Umayyad caliph Walid b. Abdul ' Malik at Damascus children were taught and the teachers had their rooms at the north gate of the Mosque. In the upper storey of a mosque a poor poet had his accommodation.[11] Children are still taught in the *sahan* (Court yards) of Azhar Mosque at Cairo and classes were held in Umar's Mosque at Jerusallem in recent past.

Elementary education was thoroughly established by the times of the early Umayyad caliphs[12]. The poet Kuwait and the famous general Hajjajb. Yusuf were school teachers (*Mu'allims*) and even before Hajjaj, Jubair b. Hayyan taught in a school at Ta'if, Dahhaq b. Muzahim (105 H/723 A.D.) maintained a free school at Kufah[13] and a Badawi of the Riya tribe settled in Basrah as a *Mu'allim* and ran a paid school as early as in the 2nd/8th century[14]. Teachers were exempt from military service.

In 1224 A.D. Yaqut writes in his Dictionary of learned men that Baghdad had 30,000 mosques in the 9th century and each mosque was a potential school. The *Qura'n* was taught in most of the mosques at Palermo in Sicily. According to Yaqut there were 300 teachers at Palermo while Ibn Hawqal (d. after 976 A.D.) writes that there were 300 schools at Palermo with numerous teachers who enjoyed social prestige.[14]

With the reading of the *Qura'n* was associated the art of writing which developed more in the East than in the West giving rise to manifold forms of calligraphy in the East while original stiff Kufic scriptdid not change much in the West : Spain, Morocco and Ifriqiyah.

In Moorish Spain grammar was added to the curriculum of the elementary school and used at a later stage in explaining old Arabic poems.[15]. 'Umar II punished his children on the violation of the rules of grammar.[16] In the East the study of the Persian poets was associated with Arabic grammar from the 13th century.

In Spain and Ifriqiyah stress was laid on the correct reading and understanding of the *Qura'n* and its orthography but penmanship as said earlier was neglected. Ibn Khaldun observes that in Maghrib (Morocco and Algeria) before learning the Qura'n thoroughly with orthography and understanding, the questions arising out of it, traditions, jurisprudence, poetry and idiom of the bedouine Arabs were excluded at the early stage of the pupil's career, while in the East more attention was paid to the culture of penmanship and of the dogmatic sciences than to the study of the *Qura'n* itself.

In Ifriqiayh by studying the *Qura'n* and Tradition they learnt scientific rules and Arabic language but without acquiring elegance of expression. In Spain students learnt rules of grammar and acquired mastery of the Arabic tongue but without paying sufficient attention to *Qura'n* and Traditions. The Qadi Abu Bakr ibn al-'Arabi writes in his *Rihlah* that students should start with Arabic peotry and grammar and learn arithmatic before studying the *Qura'n* and acquire knwoledge of dogmetic theology, fundamental of jurisprudence and dialectics before passing on to *Hadith* and the sciences connected with it. This was excellent according to the academic point of view but guardians wanted their wards to learn the *Qura'n* as a foundation stone of study before reaching the age of puberty because by that time their holds used to slacken.

The outstanding feature of Muslim education system was to travel for higher education and to join *halqah* of learned teachers. After acquring elementary knowledge in reading and writing, even swimming and riding in certain countries, in his own village or town before reaching the age of 15 or 16 the youth usually set out for the next great town to attend the classes in higher school there for further five to six years. Ibn Khaldun (d. March 1406) terminated his study at the age of twenty or twenty-one. Elderly men took to travels for increasing their knowledge. The obligation to pilgrimage to Makkah gave lovers of learning an opportunity to attend lectures of distinguished scholars in the mosques of various countries through which they passed during the course of their journey. The great philologist Azhari was glad to be captured by bedouin Arabs because that gave him an opportunity to learn their lanuguage and literature.[17] After acquiring fame al-Ashari (been 260/ H/873) set in the *hal,ha* of Marwazi.[18].

Every teacher has his special seat in the mosque which was inherited by his Khalifah after his retirement or death. When Imam Shafi ' i fell mortally ill dispute arose between two of his distinguished pupils as to who was to lecture in his place. One lectured under the arch where Imam Shafi 'i used to sit and the other look his seat under the next arch but one.[19]

There was no examination but after the completion of the course for which no time was fixed and depended mostly on the ability of the students concerned, a pupil used to have the *ijazah* (certificate) of his master to teach that subject. Many teachers including zamakhshari (March 8, 1075—June 14, 1144) were very cautious in issuing certificates. In the last of the biographies, Ibn Khallikan (d. 1282 A.D.) mentions an *ijazah* with signature and date. The importance of *ijazah* was determined by the name and fame of the issuing authority (teacher).

The higher education originally included the science of law evolving out of the *Qur'an* traditions and the natural inferenees drawn from them. The great al-Shafi'i discussing *fiqh* spent most of his time in Amr's Mosque at Fustat. Since the 3rd/9th century besides *Hadith Fiqh* was the main subject of discussion in the Mosque. ' Umar b ' Abdal-' Aziz (d. 101/H 720 A.D.) sent a learned *maula* to Egypt to teach the Sunna and after that a number of muftis and qadis were found sitting in their *halqah* in ' Amr's Mosque at Fustat and teaching Islamic sciences. The first to teach at ' Amr's Mosque in Egypt was Yazid b. Abi Habib (d. 128 H/745-6 A.D.) sent by ' Umar, as mufti.[20] The Maliki Muhammad al-Na'ali (d. 380/990) had a large *halqah* of listeners in ' Amr's Mosques covering 17 pillars.[21]

The science of medicine which also emanated from the Qura'n according to some was included in the higher studies.[22] Ibn al-Haytham (d. 430 H/1039 A.D.) delivered lectures on medicine in al-Azhar Mosque during the time of the Fatimid caliph al-Hakim. On restoring the Mosque of Ibn Tulun, governor of Egypt (868—884 A.D.) at Fustat, Husamat Din Lajin (Nov. 1297—February, 1299), the Bahri Mamluk Sultan endowed lectureship on medicine.

Philology and other studies, speculative and mathematical, were included in the course of higher study. Great stress was laid on the study of philology in order to understand the *Qura'n* and *Hadith* correctly. On inheriting 60,000 dirhams from his father, Abdullah ibn Mubarak spent half and another half on the study of Islamic law and Arabic grammar. Thus under one and same roof of the mosque the legists and jurists discussed questions of law and the philologists explained rhetoric and prosody, Arabic verses and poems. The poet Sanaubari used to meet a circle (*halqah*) if Egyptian, Syrian and Mesopotamian literati in a

book-dealer's house at Edessa.[22a] The Faqith Sa 'id bin al-Musayb discussed Arabic poetry in the Mosque of Madinah. The poet Hariri delivered lectures on secular poems in a mosque at Basra[22b]. The great historian Tabari (839—923 A.C.) recited the poems pf al-Tirrimah (*Diwan of Tirrimah*) to the great Savant Ali b. Sarraj in the 'Amr's Mosque at Fustat beside the Bayt al-Mal-[23]. About the beginning of the 8th century A.D. the poet al-Kuwait taught in the Mosque of Kufah. Quite different subjects were treated in the mosques and listners also had their say in the selections of the subject.[24] Al-Khatib al-Baghdadi (d. 465/1073) read his *Tarikh Baghdad* a biographical work of general nature in the big mosque of his capital city.

To avoid angry discussions admission to the *halqah* (Circle) was subject to the consent of the lecturer which was seldom refused. Hatimi received permission to attend the lecture of Mutanabbi (d. 965 A.D.) a great Arab poet while persons holding the views of Imam Bukhari (d. 256/870); were not allowed to listen to his opponent Muhammad ibn Yaya.[25] Logic and philosophy were included in higher studies though innovations were not allowed in Islam. Despite Ibn Khaldun's view that '*Allalsafah dararuha fial-din kathir*" philosoply is very injurious to Islam,[26] Islam produced philosophers like Ibn Sina, Ghazzali, Ibn Rushd (Averroes) and Ibn Zuhr (Avempace). From the biography of al-Khatib al-Baghdadi we learn that in big mosques' one has to obtain permission from the mosque authority to deliver lecture. The desire to shine, dialectical contest was hightened by the frequent presence of patrons of learning in public lectures. Ibn Rushed (1126—December, 1198) of Cordova and Ibn Zuhr (109/1162 A.D.) of Seville, the great philosophers of Andalus once participated in a debate on the relative merits and importance of the cities of Cordova and Seville. Abu'l Walid Isma'ilb. Muhammad al-Shaqundi, the author of *Euloqio del Islam* held a debate with an African scholar in the 12th century A.D.[27].

The lecturer followed mostly books written by himself and the students who did not take down notes were often censured but there were some who could memorise the entire lecture. Al-Isfaraima certified that Kushairi was able to commit the entire lecture to memory without taking down any note of it.[28] Al-Zuhri (d. 22 H/741 A.D.) preferred teaching by conversations and discussions and used to have answers to his questions from his listeners [29]. Nawawi (d. 1278 A.D.) used to go to the house of this and that Ansar and put questions even to the women [30]. Higher study was thus a thorough drilling in the subject. The real training in law and medicine was secured by exercises. For fifteen years our Ghafur practised law along with theoretical study of jurisprudence [31]. Ibn Sina (d. 1037 A.D.) delivered lectures on medicine after practising for some time [32]. After 4th/10th century there was relaxation in this practical training although it continued to be a special feature of some enthusiastic teachers. Old professors had special repetiteurs as their assistants who helped the students in getting up

their subjects. They were selected from among the students themselves which helped the repetiteurs in further grounding of their subjects [33]. Questions from among the students were appreciated [34] but they were many and various specially in advanced courses and public lectures [35]. Abuz-Zinad (d. 131 H/738-9 A.D.) even while out of the mosque of madinah had to answer many questions of various nature to his pupils. The duty to occupy with the people was the most difficult side of the muslim education system in medieval time [36]. Freedom in Muslim education made the rationalist Imam Abu Hanifa (who died in 150/769 and buried in the Khayzuran country of Baghdad) to compromise and to be reasonable in adjustment with the orthodox Imam Malik (borne in 715) and Imam Shafi'i (d. 30th Rajab 204/ January 20,820) and *vice versa*. Malik and Shafi'i were themselves the models of peaceful co-existence in Egypt. Under the Abbasid caliph Ma'mun (813-35) Muslim leaders of thought specially Imam Ibn Hanbal (d. Sept. 855) a great Muhaddith suffered scourage and imprisonment for not believing in the creation of *Quran* in 228H/833 [37] and under Alp Arsalan (1063-72 A.D.) the Asharites were crushed in Khurasan and Kushairi had to escape from barbarism. State interfered when religious orthodoxy was in danger. The famous Dhual-Nun al-Misri (d. 245H/859 A.D.) the staunch follower of Sufyan al-Thaur had to travel from Egypt to Baghdad to answer charge of zindiqism raised against him before the Abbasid caliph Mutawakkil, who was however, impressed very much by his speech dealing with Hadith and thus he was relieved of torture [38].

Discussions were not uncommon and scholar of repute won over the audience of their adversaries. Listners of all social status attended the lectures in the mosque and immature lecturers joined the *halqah*. Darqutri stopped delivering lecture when Abu Mohammad al-Dasuir le-Muhammad le-Bashshar al-Anbari (d. 304-5/916-17) started dictating notes to his pupils. [39] Al-Maqdisi writes in 985 A.D. that learned men of al-Faris used to sit in the mosque twice daily before mid day and after *Asr* prayer for the common people.

Poor students, teachers and travellers used to live in the annexes of the mosques. According to Spanish traveller Ibn Jubayr (d. 1217 A.D.) the Umayyad Mosque of Damascus had well equipped dwellings for ascetics, scholars, students and poor travellers. There were several waqfs attached for the maintenance of the mosques and their schools. The Abbasid caliph al-Qadir (363-8 H/973-8 A.D.) sent food from his dining table every day to be distributed among those who lived in the mosques. Abu Ishaq Shirazi the professor of Nizamiyah, had his meal often in the Mosque [40].

There was interval between two lectures but the time was not fixed. Some delivered lectures daliy. [41] others once a week, particularly on Monday [42]. Anbari lectured on philology every Friday [43]. About 565 H/170 A.D. al-Barawi delivered daily more than one lecture [44]. At prayer times delivery of lectures was stopped. There was no vacation without completing the course which differed from teacher to teacher.

Hospitals and libraries were also attached with the mosques. Ibn Tulun, the governor of Egypt (868-84 A.D.), built a hospital for the poor at Fustat in 259 or 261 H/873 or 875 A.D. and installed a dispensary behind the Mosque where a physician used to attend the patients every Friday. In the Mosques of Makkah and Madinah there were large collections of books endowed by scholars and patrons of learning. The Jami 'Zaituna of Tunis had a big library. In the 6th/12th century there were ten public endowed libraries in the mosques at Marw. The Umayyad caliphs of Spain endowed their royal libraries to the Cordova Mosque University [45] and the Fatimid caliphs to al-Azhar Mosque University of Cairo which is still extant.

No one was allowed to use the books of others in a public lecture without the prior permission. Even to recite the verses of a poet his consent was required[46]. A learned man of the 13th century secured written permission for using the *Sahih* of Bukhari although composed 300 years before in the 10th century. As regards the Maqamat, Hariri's sons held copyright [47].

Conclusion :—Medieval Muslim education system extended from Khurasan and Persia to Morocco and Spain, the chief pivots being Madinah, Dmascus, Baghdad, Cairo, Qairawan and Cordova. There was idealism in early muslim education. Books were held sacred and teachers were respected. Teaching was considered a religious duty and scholarship was prized. Al-Maqqari who himself taught in the mosques of Cordova and al-Zahira writes that when Faqih Abu Ibrahim was delivering a lecture one day after *asr* prayer at the mosque of Abu Uthamah in Cordova received a call from Hakam II but he did not go to see him till the lecture was over [48]. It was the value of education which made Salahuddin Ayyubi different from Richard in manners and conduct and Muslim intellectuals became the peers of civilized world for several centuries. It was the democratic spirit of Islam that rich and poor both attended the same school and scholars like al-Jahiz rose from humble origins. The first school for Arabic literature was established by Ibn Abbas (d. 68 H/687) in a valley near Makkah [49]. Ibn Hisham al-Makhzumi arranged for regular teaching in the great Mosque of Damascus much before the establishment of Azhar Mosque Institution. Cases cited above illustrate the extent the mosque was used as a centre of learning and scholarship. The Ummayyad caliph Hakam II (961-76 A.D.) established three free schools around the Cordova Mosque and twenty-four in the suburbs of the capital. A large orphanage was maintained in Cordova under the same caliph. There were other orphanges in other big cities. Students paid fees and received stipends. The material needs of the students and scholars were met by the endowments. Ibn Battutah's testimony on this point is creditable. Students from Khurasan and eastern borders had assembled in the Mosque institutions of Baghdad before Nizamiyah Madrash. It was the professor who mattered and students flocked from all parts to one with a reputation. From the biography of Khatib al-Baghdadi we learn that prior permission was necessary to deliver a lecture in big mosques. By the side of al-Azhar mosque a dwelling house built for 35 professors

was inaugurated by the Fatimid caliph al-Aziz (975-96 A.C.) along with his wazir yaqub ibn Killis in 378/988 [50]. Nasir Khusru who lived in the 5th/11th century writes that Amr's Mosque was visited by 5,000 persons daily and circles of people were seen there attending lectures in all kinds of science.

Books not being available students resorted to the use of notes dictated by the teachers. Memory was over developed among the Muslim due to learning lessons by heart. Ibn 'Abbad' used 30 camels for carrying books during his journey [51] and Harun al-Rashid (d. 809 A.C.) carried eighteen cases of books on one of his journey [52]. Among the monuments to Arabic education were the History of al-Tabari (923 A.D.), the scientific achievement of al-Hazen (about 1100 A.D.) who was the first physicist to note the magnifying power of spherical segments of glass in lences, [53] the mathematical accomplishments of al-Khwarizmi (9th century), the medical and philosophical contributions of Ibn Sina (1037 A.D.), the philosophy of Ibn Rushd (Averroesl, 1198 A.D.), the poetry of al-Mutanabbi (965) and Ab'ul Ala' (1057 A.D.).

FOOT NOTES

1. *Dictionary of Learned Men*, VI, p. 76.
2. Author of *Tahdhibul Asma'* (the *Bibliographical Dictionary*, edt. by Wustenfeld).
3. Shibli Nu'mani, *Sirat al-Nabi*, Vol. I, Azamgarh, 1264 H., pp. 292—94 quoted by the writer in his book' *A Political History of the Muslims*, Vol. I, Dacca 1961, p. 29.
4. *Ibid.*, p. 29.
5. Margoliouth, D.S., *Mohammad and the Rise of Islam*, London, 1905, p. 270.
6. Mubarrad, *Kamil* ed. Wright, Leipzig, 1874, p. 150.
7. Jahiz, Bayan, I, 213.
8.
9. Tirmidhi, Sahih, Cairo, 1292 H, I, p. 359.
10. Ibn Khallikan, No. 335.
11. Ibn Khallikan, No. 307.
12. Ibn Suyuti, *Bughiat al-Wu'at*, Cairo, 1326 H, p. 253.
13. Ibn Sa'd, Vi, p. 210.
14. Yaqut, *Dictionary of Learned Men* ed Margoliouth, 1909, II, 239.
15. Ibn Khaldun quoted by Slane in his Introduction to the translation of Ibn Khallikan, Vol. II, p. 12.
16. Yaqut, *Dictionary*, I, p. 25.
17. Ibn Khallikan Nr. 650.
18. Ibn Khallikan. Nr. 440, Fasc. 14 ; cf. Nr. 388, 406.
19. *Ibid.*, Mr. 412.
20. *Husn al Muhtadarah*, Vol. I, p. 131.
21. *Ibid.*, p. 207.
22. Shapi'i in *Burhanuddin Saruft*, ed. Caspario, p. 7.
22. A. Mez, *Renaissance des Islam*. p. 250. tr.

22-B Khuda Bakhsh, *Studies : Indian and Islamic*, p. 178, lt .
23. Cf, Imamuddin, *A Political History of the Muslims*, Vol. II, Part I, p. XV (Introduction).
24. Cf. Razwini, *Consmography*, II, p. 252
25. Ibn Khallikan No. 660 (Engl. tr. Vol. I, p. 102).
26. Ibn Khallikan, Nr. 727.
27. Gayangos, *The Mohammedan Dynasties*, Vol. II, pp. 121-2.
28. Abul Feda, I, 454, Cf, Ibn Khallikan Nr. 269.
29. Abul Feda, I, 454 ; Ibn Khallikan, Nr. 269.
30. Nawawi, p. 117 ; Cf. Wustanfeld's *Life and Writings of Nawawi*, Gettingen, 1849 tr.
31. Nawawi, p. 64.
32. Ibn Khallikan, Nr. 189, Fasc. II, 131 ; cf. Fihrist for his biography.
33. Ibn Khallikan nos. 606, 400, 422,442, 852, Fasc. XI.
34. Abu'l Feda, II, 140 ; Ibn Khallikan no. 646.
35. Ibn Khallikan, nos. 395, 603.
36. Ibn Khallikan, Nr. 408.
37. Cf. Imamuddin, *A Political History of the Muslims*, Vol. II/I, p. 154.
38. Cf. Ibn Khallikan, I, 291—93 ; Ibn Asakir, 272 ; Nicholson, Sufism, JRAS, 1906, Nr. 309—311.
39. Ibn Khallikan, Nr. 640.
40. Nawawi pp. 647, 648.
41. Ibn Khallikan, Nr. 668.
42. Ibn Khallikan, Nr. 413
43. Ibn Khallikan, Nr. 653.
44. Ibn Khallikan, Nr. 603.
45. Cf. *Hispano-Arab Libraries* by S. M. Imamuddin, Karachi, 1961. Cordova University and al-Azhar are subjects to be dealt separately.
46. Ibn Khallikan, nos. 396, 616.
47. Ibn Khallikan, nos. 546, Fasc. VI.
48. Gayangos, Eng. tr. Maqqari's Nafh al-Tib, II, p. 172.
49. Ibn Khallikan, Introduction by Stane Vol. I, p. 3a.
50. Al-Maqrizi, IV, 49.
51. Al-Aghani, I, p. 1.
52. Al-Aghani, V, p. 64.
53. Cf. Sedgwick and Tyler, A short history of Science.

HOLY PROPHET'S CONTRIBUTION TO HUMANISING WELFARE

SIYAR the term used for the Muslim International Law, is the plural of Seerat, meaning conduct and behaviour. Originally Seerat meant the conduct of the Prophet more especially in his wars. Later the meaning of the plural of Seerat was widened and it embraced in its fold the conduct and behaviour of the Muslim state or states towards the non-muslim states and in course of time it become an independent branch of Islamic Law dealing with war, peace and neutrality.

Of all the Muslim jurists, Shaybani made the biggest contribution in formulating the Muslim International Law through his admirable work-Kitab al-Siyar al-Kabir which was compiled in the beginning of ninth century A.D., while Hugo Grotius, the so-called father of modern International Law, emerged in the seventeenth century.

The sources of modern law of the nations are grouped under the general headings of custom, authority, agreement and reason. The translator of Shaybani's "Siyar" Majid Khadduri says : "The sunna and local practices are equivalent to custom ; the Quran and Prophet's utterances, and the caliph's decisions and instructions represent authority ; principles and rules enshrined in treaties with non-Muslims fall in the category of agreement ; and juristic writings based on analogical deduction and other forms of juristic reasoning in accordance with Islamic legal methodology may be said collectively to represent reason". The author further states that Islamic Law may be rgarded as a form of natural law derived partly from the Quran the very word of God and from Prophet Muhammad's utterances, inspired by Divine wisdom. Quoting from the Quran Dr. Hamidullah says that Quran itself has expressly and unequivocally put the word of the Prophet on a par with the Quran on the basis that what the Messenger uttered on behalf of the Sender is taken as the Sender's word. Thus we find that the earliest and the major source of the Muslim International Law was the Quran and the utterances of the Prophet.

NUCLEUS OF LAWS

Glancing through Shaybani's "Siyar" one finds that the utterances of the Prophet and his model behaviour provided the nucleus of the Islamic Laws of war, peace and neutrality and that formed the basis on which the super-structure of the Muslim International law was built by the Muslim jurists of course, with the help of the secondary sources. As the Prophet's contribution was too great, multipronged and all embracing, and thus hard to be covered in a single paper, it is proposed to take up only one fact of his contribution namely that related to the humanising of warfare. But the study, as a matter of principle requires a bird's eye view of the customs of warfare prevalent before the emergence of Islam.

Jews, according to Oppenheim, were sworn enemies of some foreign nations. When they went to war with those nations their practice was extremely cruel. They killed not only the warriors on the battlefield, but also the aged, the women and the children in their homes. The Greeks observed human rules of war with the city-states inhabited by the people bound by the ties of race and language and religion but "they looked down upon their neighbours as barbarians". Among Romans for warfare itself no legal rules existed but discretion only and there are examples enough of great cruelty on the part of the Romans : they "could act according to discretion with the lives and property of the enemy". Even a thousand years after the Christian nations had no laws governing the conduct of war Dr. Hamidullah quotes Hugo Grotius, father of European International law to the effect that "in his time (seventeenth century) the Christian nations of Europe behaved in their wars in a manner that even barbarians would be ashamed of".

The directives of the Prophet of Islam (peace be upon him) relating to the humanising of warfare as recorded in Shaybani's "Siyar" are as follows :

1. Whenever the Apostle of God sent forth an army or a detachment, he charged its commander personally to fear God, the Most High, and he enjoined the Muslims who were with him to do good (*i.e.* to conduct themselves properly).
2. Do not cheat or commit treachery, nor should you mutilate anyone or kill children.
3. The Prophet of God prohibited the killing of women.
4. The Apostle of God said : "you may kill the adults of the unbelievers, but spare their minors—the youth".
5. A still more comprehensive directive. Whenever the Apostle of God sent forth a detachment he said to it : "Do not cheat or commit treachery, nor should you mutilate or kill children, women or old men".

Sarakhsi says in his commentary on Shaybani's "Siyar" that the Prophet forbade persons who had asked for permission to kill their non-Muslim parents on ground of hostility to Islam.

According to Sahih Muslim quoted by Hamidullah, the Prophet said : "Fairness is prescribed by God in every matter : so if you kill in a fair way". That remained the conduct of the Prophet throughout.

The most splendid example of an human conduct of war was the conduct of the Prophet when after its conquest he entered Mecca. In the city where he and his followers had undergone a long trail of tortures ultimately leading to the Hijrat, he was magnanimous enough to declare a general amnesty excluding about half a dozen state criminals guilty or murder or apostasy or similar offences. Later, according to Ibn Hisham, those too were pardoned except those who were killed by Muslim soldiers without referring again to the Prophet. "The

amnesty covered all who entered the courtyard of Ka'aba or the house of their chief Abu Sufyan or who shut up the doors of their houses or laid down their arms. Quarter based on the Quranic directive was invariably given and according to one Hadith, even the most ordinary Muslim may grant quarter which would be binding on the totality of the Muslim state.

PRISONERS OF WAR

With regard to the prisoners of war, a study of various authorities reveals that the Prophet's practice was as follows :

1. No killing of the prisoners.
2. Due respect to the dignitaries among them.
3. Protection from heat and cold or other discomforts.
4. Provision of clothes to those who needed.
5. Permission to draw up wills for the property at home and the despatch of the same through the lines.
6. Near relatives to be kept at the same place.
7. No exaction of labour.

Thus the Holy Prophet (peace be upon him) said the foundations of Muslim International Law in relation to humanising the warfare on which the jurists built up a detailed law of war.

SHARIAH IN THE FIFTEENTH CENTURY OF HIJRA PROBLEMS AND PROSPECTS

The aim of Shariah is to make people happier in this world and the hereafter. Therefore, it follows that Islamic Jurisprudence must be considered indivisible, or an integral whole, because adopting a part thereof and dropping the other part would not be conducive to the achievement of its objectives and purpose. Any study of Quranic texts containing these laws and rules reveals that any violation of them invokes two sanctions : one secular and the other celestial. For instance, a brigand is punished by death or by chopping off some of his limbs, or by crucifixion or exileall these are mundane penalties to be added to heavy punishment in the Hereafter.[1]

Likewise, scandalous talebearing and accusation of chaste women are punishable in this world and the Hereafter.[2]

Similarly, intentional murder has two penalties : ratification in this world and torture in the Hereafter.[3]

Thus, all laws issuing form Islamic jurisprudence invoke two sanctions and are indivisible and inseparable. But, in recent times, there are some muslim rules and scholars who contend that some of the Islamic provisions should not be utilized. They contradict their own belief that all the provisions of Islamic jurisprudence are permanent in nature and application. The champions of this view, infact, are inclined not to apply the Shariah laws from fear of foreign indignation or some other similar reasons.

At times, in medical practice, a minor symptom leads to a general check up which in turn uncovers a major ailment only indirectly related to the original symptom. A similar sequence can occur in social sciences as well. Thus the present declaration by Pakistan to introduce Shariah, and the Islamic Revolution in Iran again emphasising on establishment of Shariah system have caused worldwide commotion. It has also recipitated a closer look by the Western countries and the powerful news media of the Western world towards Islam as a Religion and Shariah as a system of law of the *Ummah.*

For the last two hundred years or so the Shariah has been represented by the Western World as a barborous system of law, totally impracticable in the modern age. This false propaganda had caught the imagination of the elites in the Muslim countries owing to the brain washing that they received in Europe where most of them were educated. Things had reached such a low in the Muslim countries that many of their so-called " Muslim " rulers were openly indulging in debauchery, drinking and other diabolical activities. And, in fact, it was this elitist class which was repeating *ad nauseauit* the European bogey of Shariah being " impracticable ".

Many voices were raised in favour of Shariah in the past but they were mostly curbed by either the colonial Masters of the Muslim countries or the brain-washed Muslim rulers. However, in the wake of the era of declonisation and a couraged power structure in recent years, a new wave has come in the Muslim World. The younger generation in its thirties and forties have again embarked upon its quest for Islamic indentity whose glaring example is afforded by Pakistan and Iran. This has set them upon doing a little soul-researching in order to so reshape their legal systems as would narate the Islamic values.

The realistic choice seems to have narrowed down to Islamic Shariah because of the fact that the so-called " modern ", " progressive " and " enlightened " man-made laws of the Western World have only led to increase in crime-rate, in broken-homes, in mental-diseases, in chaos and confusion.

WESTERN INFLUENCE IN THE MUSLIM COUNTRIES

The influence of the Western World as first felt in the Muslim countries with the coming of imperialism in the early 19th century. So far the Muslim lands had a definite legal system guiding them in all aspects of public, private and international dealings. This system was no other than the *Shariah*. The laws of European origin were thrust upon the countries occupied by the British, French or Dutch imperialists against the will of the people and the laments of the *Ulama* But gradually the Muslims who were trained under the influence of these new-rulers were given the opportunity to proceed for higher studies in European countries. Thus, the imperialists found their supporters from the distant lands occupied by them, and those indigenous, in turn, influenced the masses and to some extent even the *Ulama*. It was a long and ardous process of change but ultimately the colonialists succeeded. The *Ulama* were lirtened and a compromise was struck which resulted into the Anglo-Mohammedan or France-Muhammedan law.

The first influence of the common law or European legal system on the Muslim society was found in the fields of public law including constitutional and criminal law as well as the civil and commercial transactions.

The European rulers were clever enough not to bring about the changes in the personal law of the Muslims at once.

The Ottoman empire, the then seat of the Islamic caliphate was the first to be influenced by the European legal system in the 19th century through the capitulations which the Western powers introduced in respect of their citizens who were residing in the Middle East as the civil servants and traders. In countries in South and South-East Asia and East and West Africa, the colonialists had made their in-roads as traders. Here the European system of commercial law was applied under the capitulatory system. The Ottoman empire introduced its first so-called ' reforms ' which are well known as the *Tanzimat* between 1839 and 1876. By 1850 they fully introduced commercial law based on French commercial code.

As if this was not engough, in 1858 they adopted French penal code which replaced the *Hadd* punishments of the *Shariah*. The Ottoman empire the strongest Mulsim power, was followed by Egypt where, in 1875, they adopted the rench penal law replacing the Shariah and French commercial law. While doing so, they tried to strike a compromise between the colonial legal system and the Islamic legal system. Later, the Italian and German influences also crept in the Muslim countries. Towards the end of the 19th century, that is by 1875 and 1883, three-quarters of the legal system in Muslim lands was derived from the European legal system. In India, the *Shariah* system which was practised during the centuries of Moghul rule was replaced by India penal code in 1862. By 1899, Sudan also became a victim. The last to be affected by the European legal systems were the countries of the Maghreb, Morocco and Tunisia and Nigeria in West Africa. The colonial rule was established in Tunisia by France in 1891 and in Morocco in 1912. The Northern Nigeria was taken over by 1912. Lord Marcaulay declared in India that Islamic legal system was out-moded and did not provide any justice what-so-ever while Lord Lugard in Nigeria declared that the *Shariah* system was " repugnant to natural justice and humanity." 4

The Egyptian martyr ' Abd al-Qadir, Audah has vividly portrayed the picture of Egypt and other Muslim countries in the following words :

" Consequent to the introduction of European law of Muslim countries special courts were established. The judges of these courts were appointed from among Europeans or indigenous scholars who had never studied Islamic jurisprudence. The new courts considered themselves entitled to assume jurisdiction over all kinds of litigation; a jurisdiction which, parctically speaking, left inoperative and neglected the analogous decisions of Islamic jurisprudence, especially since the newly-formed courts did not apply any but their own laws. Besides, educational authorities had established special schools to teach the new philospohies of law. Naturally, such schools gave full attention to the study of the European codes, neglecting Islamic jurisprudence, except in the instance of a few matters such as *Waqf*. This attitude led to a lamentable end, inasmuch as nearly all the jurists, who were among the elite of the educated, were kept ignorant of the principles of Islamic law. It is lamentable because this ignorance is equivalent to their ignorance of the jurisdiction and rules of their religion, which is the religion of all countries claiming to be Islamic. This came ignorance led to the introduction and integration of the meagre provisions cited from European law, though these were diverse from the implications of Islamic jurisprudence, in some cases. For instance, the Egyptian penal law stipulated that all its provisions should be applied without prejudice to any way to the rights of individuals as establushed by Islamic jurisprudence. But despite this express provision, Egyptian jurists felt no need to acquiant themselves with the details of the rights declared by Islam.

They confined their competence in the study of individual rights to what was inscribed in the French legal system and to what the French jurists have expounded.

validating them on the same legal bases as did the French. Egyptian jurists went far in this direction, being influenced by two factors :

First : They did not study Islamic jurisprudence and knew nothing of its principles and provisions ;

Second : They bound themselves by the views and precedents of the European jurists generally, and the French specifically, allowing what they allowed and prohibiting what they prohibited. It goes without saying that the European jurists knew absolutely nothing about Islamic jurisprudence ".

Among the European-educated Muslim elites are those who believe that Islamic jurisprudence is primarily the result of juristic innovations. If one submit to them an Islamic theory of jurisprudence that was unknown to man-made jurisprudence till date, they would express their astonishment at the Muslim jurists who could reach levels of judicial competence in the seventh and eight centuries that other jurists could not reach or conceive of until the nineteenth and twentieth centuries ! Imams Abu Hanifah, Malik, Shafi'i and Ahmad bin Hanbal and their desciples could think of matter thirteen centuries ahead of the European jurists of the present century. But those who believe that Islamic juris- believe that those jurists themselves were capable of preceding human thought. The correct viewpoint is that Muslim jurists, despite their vast erudition and profound reflections, did not really introduce novelities from their own imagination, nor were they above human standards with respect to their meditative faculties.

The fact is that they found within their grasp a system of jurisprudence Divinely-enriched with theories and comprehensive principles and they explained and analyzed them to the fullest. They did nothing more than what any jurist and genuine thinker would try to do by collecting all the available data and assigning to each theory what is relevant to it and tabulating under each principle what belongs to it. If there had been any innovation or precedence of thinking, it would have been the innovation of Islamic jurisprudence which was itself ahead of human rational development, and which revealed the most perfect theories for the purpose of guiding human beings towards exaltation and perfection by raising them to its elevated standards.

Inspite of the multifarious advancement of Muslim in all branches of human knowledge, some Western scholars, while commenting on the flourishing Civilization of the Muslim states in the Middle Ages, have said what an average Muslim, with a little knowledge of Islamic history, will feel reluctant to accept as a true picture ".[5] If it is said of Eurpoe that the European Christian states and society had remained basically static, it will be absoultely true. The contribution of Islam and its civilization to Europe is so very great that it really helped to achieve whatever they could achieve during the period of renaissance due to the influence of their encounter with Muslims and due to fresh ideas pouring from the presence of Muslims in Europe. Arguing from this false premise, the western scholars

have maintained that because Muslim states and society had remained basically static, the Shariah law had proved able to accommodate itself successfully to such internal requirements as the passage of time had produced. But the pressure which now (*i.e.* in the nineteenth century) arose from without confronted Islam with an entirely different situation.....................

Because of the rigidity of the Shariah and the dominance of the theory of *taqlid* (or strict adherence to established doctrine), an apparently irreconcilable conflict was now produced between the traditional law and the needs of Muslim society, in so far as it aspired to organise itself by western standards and values. Accordingly there seemed, initially at any rate, no alternative but to abandon the Shariah and replace it with laws of western inspiration in those spheres where Islam felt a particular urgency to adapt itself to modern conditions "[6].

This is wholly untrue as the pressures of adopting western legal system, which was based on concepts and institutions fundamentally alien to the religion of Islam and to the Shariah, came not from the Muslims but from the western colonialists. The Muslims did not aspire in the beginning of the colonial rule to change their Islamic legal system nor did they wish to adopt western standards and values. The pages of history are filled with many examples of the opposition of Muslims to the forced change in their religious law. But the centuries of foreign dominance changed the situation drastically. The western imperialist found Muslim natives to help their cause apart from their governmental pressures to adopt the new system of law. As result, whatever little of the Shariah that continued in force in the Muslim countries was found only in the area of family law but there too certain so-called ' reforms ' were introduced. In all the Muslim countries, with the exception of Saudi Arabia, the hybried system of law which was neither *Shariah* nor purely European law is in practise till today. It is only in the late seventies that efforts are being made by certain Muslim nations to re-introduce *Shariah* but there too exists many hurdles in the way which we will examine later.

THE MYTH OF NEW-IJTIHAD AND THE CHANGES IN SHARIAH LAW

Many a Muslim country after independence has adopted legal concepts from abroad without regard to their suitability for the Islamic social milieu and the basic spirit of the religion of Islam. Since Anglo-Mohammedan and Franceo-Mohammedan legal systems have operated side by side with whatever was left of the Shariah during the pre-Independence period in the Muslim World, conflicts have often arisen. The Shariah and the Western common law cannot be fused together completely nor will it be allowed by the *Ulama* of Islam and well-meaning Muslims. This is the reason why the mixed law has not been able to command the respect of Muslims. It is my candid belief that if the process of *Ijma*, *Qiyas*, *Masalih al-Mursalah*, *Istislah* and *Istidlal* are properly made to work, the Shariah will meet the challenges and the necessities of the modern life.

After the second World War, Mulsim countries began to gain Independence from colonial masters of Europe. Some new Muslim states declared Islamic law

as their source of legislation. Muslim and non-Muslim scholars like. Dr. 'Abd al-Razzaq al-Sanhuri and Professor Anderson were invited to advise them in the process. Dr. Sanhuri drafted civil codes particularly as regards the law of contract and property for Egypt, Syria, Iraq and Libya. Professor Anderson was invited by Habib Bourgiba of Tunisia and Sir Ahmadu Bello of Nigeria to advise on Islamic legal system. In their march towards modernisation and secularization Egypt and Tunisia, in 1955 and 1956 respecitvely, abolished the Shariah courts entirely.

Even the law of personal Status which was still based on Shariah is now administered by a unified system of national courts along with the civil and criminal law.

In Algeria the French legal system influenced the country so much that the courts of the *Qadis* act only as courts of the first instance and the appeals are to be made to judges who are sitting in the Ordinary civil courts. In India the remnant of the Shariah law has been put in the hands of ordinary civil courts for the last two hundred years and the final appeal was only to be made to the Judicial Committee of the Privy Council. In the craze for modernization, the entire Shariah was entrusted to be administered in the hands of incompetent lawyers who were solely versed in common law but certainly were not competent engough to administer the Shariah. The fusion of the two systems resulted into confusion which will take a long time to be removed from the minds of the Muslim elites. Many of the laws based on the Quranic injunctions and the Sunnah of the Prophet were deliberately " reformed ". Since the Judges did not possess sound knowledge of Shariah, they tried to formulate novel principles by way of supplement to the traditional Islamic law in the name of so-called justice and equity. They considered Shariah as rigid, harsh and inequitable under modern conditions and hence they thought it was necessary for them to tamper with the divine law. The following examples would show how the so-called ' refomers ' without any sanction from the Book of Allah and the Sunnah tried to ' modernize ' and ' reform ' Shariah. Looking at the Muslim world today there are three categories in which these countries can be divided as follows :

(1) the countries which have retained the practise of Shariah unchanged and uncodified as far as the Shariah family law is concerned since Islamic penal law is not practised anywhere except in Saudi Arabia.

Country	Muslim in Majority or minority	Present state of Islamic family law
1	2	3
Afghanistan	Overwhelming majority	unchanged and uncodified
Buhrain	Overwhelming majority	unchanged and uncodified
Burma	minority --	unchanged and uncodified
Ethior	Strong minority	unchanged and uncodified
Gambia	majority	unchanged and uncodified

1	2	3
Ghana	majority	unchanged and uncodified
Gold Coast	minority	unchanged and uncodified
Kuwait	overwhelming majority	unchanged and uncodified
Libya	overwhelming majority	somewhat changed and codified
Maldive	overwhelming majority	unchanged and uncodified
Mali	majortly	unchanged and uncodified
Mauritania	overwhelming majority	unchanged and uncodified
Nigeria	majority	unchanged and uncodified
Qatar	all-Muslim	unchanged and uncodified
Saudi Arabia	all-Muslim	unchanged and uncodified
Siera Leone	strong minority	unchanged and uncodified
Somalia	overwhelming majority	unchanged and uncodified
Yemen	overwhelming majority	unchanged and uncodified
Yougoslavia	strong minority	Somewhat changed but uncodified (applicable subject to certain legal enactments governing) all Yugoslavia citizens).

Pakistan has started its efforts to re-adopt Shariah recently. 7

(2) the countries where the Shariah has been changed through modern legislative process, thus subjecting the Islamic institution to regulatory measures. Many Muslim and non-Muslim scholars call these changes " Law reforms ".

TABLE 18

Country	Years of reform	The aspects of Muslim law already changed & codefied.
Algeria	1959	Consent of parties to marriage, colemnization of marraige, divorce, rights of children.
Brunei	1955	betrothal, marriage, divorce, maintenance, matrimonial offences.
Ceylon	1951	registration of marriage, marriage-age for women, guardianship, bigamy, divorce by husband, dissolution of marriage by court.
Cyprus	1951	all aspets of the law of marriage and divorce.
Egypt	1920, 1923, 1929	marriage-age, women's rights divorce, 'iddah period of gestation, custody of children matrimonial disputes and some aspects of the law of inheritance and bequests.
India	1929 1937, 1939 (the whole of India) 1876, 1920, 1935, 1942, (particular states).	dissolution of women's marriage by court, registration of marriage, amount of dower, marriage age, gestation, effect of apostacy on marriage and inheritance.

1	2	3
Indonesia	1946, 1947, 1955	registration of marriage, marriage-age, divorce by husband, delegated divorce.
Iran	1931, 1937, 1948, 1967	some aspects of the law of marriage and divorce.
Iraq	1959, 1963	bigamy, marriage-contract, maintenance, divorce by husband dissolution of marriage by court. beqiets, general principles of inheritance.
Jordan	1951	some aspects of the law of marriage and divorce.
Lebanon		some aspects of the law of marriage and divorce.
Malaysia	1949 to 1964	bethrothal, guardianship in marriage registration of marriage, divorce by husband delegated divorce, bigamy, dissolution of marriage by court. family disputes, matrimonial offences.
Morocco	1957 - 1958	some aspects of the law of marriage and divorce, including bigamy, dissolution of women's marriage by court ; some aspects of the law of intestate and testamentary succession, including orphaned grandchildren's right to inheritance.
Pakistan	1961—1962	registration of marriage, effect of apostacy on marriage and inheritance, divorce by husband, bigamy, dissolution of women's marriage by court, orphaned grandchildren's right to inheritance. life estates.
Singapore	1957, 1960	as in Malaysia and Burnei.
Sudan	1916 to 1960	guardianship-in-marriage, divorce by husband, dissolution of women's marriage by court, period of gestation, spouse-relict's right to inheritance, some special cases of inheritance, bequest to heirs.
Syria	1953	some aspects of the law relating to marriage, divorce, inheritance and bequest.
Tunisia	1956	some aspects of the laws relating to marriage, divorce, inheritance and bequest.

(3) the countries where Shariah has been abandoned and replaced by the modern law applicable to all people irrespective of their religious allegiance.

In countries like Saudi Arabia there has been no departure from Shariah in any law or enactment whether civil or ciminal. All other legislations there must conform to the Qur'an and the Sunnah of the Prophet and the conduct of the *sahabah* (Companions of the Prophet).[9] Inspite of the efforts made in codification of Islamic law in 1957, the Saudis did not put it into practice due to the opposition of the ' *Ulama*. The other countries where to lesser degree Shariah continues to opeate include Qatar, the two Yemens, Bahrain and Kuwait. The application of Shariah is confined to civil aspects only since the penal law of Shariah has been either diluted or completely changed. In all the countries of Africa, mentioned in the above tables, the Shariah criminal law is not applicable but the Maliki family law operate unchanged. These countries are Nigeria, Niger, Senegal,

Mauritania, Mali, Guinea, Chad and Gambia. In most countries of Asia, except Afganistan and Maldive, Shariah mily Law still operates according to the Hanafi school in the former and the Shafi'i school in the later. But here too changes have been made which are termed as ' Law Reforms'. The greatest victims of secularization have been the countires like Turkey and Albania where most of the laws both civil and criminal are secularized following the influences from the European countries. Once the Ottoman empire came to an end these countries abandoned Shariah totally. In his over-enthusiasm, Kemal Attaturk persecuted the ' *Ulama* and created the hatred towards Shariah in the masses. As a result, some western scholars believe that " both in theory and practise the Turkish version of Islam today is different from other Muslim peoples." [10]

It is an irony of fate that the more Ataturk tried to make Turkey equal in its status with any European country by thrusting European stile of life on his people, the more European leaders despised Turkey as " a sick man of Europe ". Likewise, the Muslim populations in Soviet Union, who are of Turkish origin, are governed by secular family law. There is not even a tinch of Shariah left intact in any form. The Muslim minority in philipines is also subjected to secular family Laws. The two countries in Africa, where the drastic secularization has been enforced are Kenya and Tanzania. Inspite of the fact that zenzibar has Predominantly Muslim population, a unified marriage law has been forced upon them recently. In all the remaining Muslim countries, Islamic penal system has been abandoned completely while the Islamic family law has been tampered with or, as the modernists put it, it has been " reformed ". Out of the three divisions that we have made of the Muslim countries or the countries where Muslims are in sizeable minorities, we have nothing much to say about the countries which have totally abandoned Shariah aping the western countries and their legal system in their leaders' search for identity with the so-called ' civilised ' western world. The few countries which have retained Shariah either in all spheres of their legal system or in Personal Status alone had to face great challenges to defend the cause of Shariah. But the third category of countries where the so-called reforms are introduced in the Shariah Family Law, a great damage is done since the modernists have attempted to change the Shariah to suit their imaginations. In the process, from the Prophet's Sunnah. We shall discuss here these so-called " reforms " in various aspects of the Islamic law of personal status in various countries :

Allamah Muhammad Iqbal, the Poet of the East, has rightly depicted the picture in the following couplets :

" They do not change themselves but wish to change the Quran;
How misguided are these theologians of the Holy sancturary;

These slaves (of Western Imperialism) think that the Book of Allah is faulty;
Since it does not teach the Believers the path of slavery ".

MARRIAGE WITH NON-MUSLIMS

Islamic law allows marriage with the women of *Ahl al-Kitab* ' people of the Book but not *vice versa*.[11] In Turkey, there is no such bar. A Muslim man or woman can marry any one belonging to any religion. In cyprus where Turkish Family Law of 1951 is applicable, there is a slight difference as regards this aspect of law. It provides that marriage of Muslim woman with non-Mulim man is prohibited.[12] In both Lebanon and Israel, the Othoman law of Family Rights of 1917 continues to be applicable to the Muslims. It declares the marriage of a Muslim woman with a non-Muslim man as void but it is silent about the marriage of a Muslim man with a non-Mulism wife belonging to any religion whatsoever. There is no distinction between *Ahl al-Kitab* and polytheists and unbeliever.[13]

TA'ADDUD AL-ZAWJAT : POLYGAMY

Islam allows polygamy in special cirmustances provided justice is done to all the wives but does not permit it at will. At the same time the Holy Quran, the Sunnah and the conduct of the *sahabah* show quite clearly that polygamy was practised in the time of the Prophet, the *Rashidun* Caliphs and in subsequent periods. Thus, Shariah is not against limited polygamy which must not exceed more than four wives. Polygamy can prove to be a remedy for many evils in the modern promiscuous society of ours.

It is true that at times the rationale of the Quranic in functions[14] of polygamy and the conditions attached to it were misconstrued and misused by some Muslims all over the Muslim world. But, the same is equally true of the misuse of some other lawful provisons made by Shariah. This is not peculiar with Muslims alone as it is a general human weakness that there are always some people who flagrantly violate the principles of ethics and morality and other aspects of natural law and justice. The modernists, however, clamped down on the provision of polygamy and imposed various un-Islamic restrictions on bigamous marriages which they proudly call ' reforms ' in Islamic Law. According to the Syrian law of Personal Status of 1953, article 17, prior permission of the court will be required for bigamous marriage desired by husband. The Iranian Family Protection Law of 1967, article 14, the Iraqi law of Personal Status of 1959, article 3 (iv) and the Malaysian Law sections 37 have imposed similar restrictions on a Muslim wishing to marry a second wife. All these countries require that the husband must be financially capable to maintain more than one wife before the court could grant him permission to take a second wife. Iran and Iraq even went to the extent that the person desiring to marry a second wife must obtain permission of the court which must declare that the husband is capable of doing equal justice between the co-wives.[15] It is simply impossible for any court to find out that the housand is capable of doing equal justice between the co-wives or not, when the Quran specifically mentions that no matter how you desire to do equal justice between your wives you will not be able to do so. In Iraq, there is yet another condition imposed that there must be some " lawful benefit " involved in the proposed bigamous marriage.[16]

In Pakistan, prior permission of an Arbitration Council is required before taking a second wife according to the Muslim Family Law Ordinance, 1961. It is only the Arbitration Council which will decide whether the marriage is necessary and just.[17] If the husband violates this provision he will have to pay forthwith the entire amount of dower to the first wife and it would furnish a ground for dissolution of her marriage by the court.[18] In Turkey, the civil code of 1926 has forbidden completely a bigamous marriage.[19] If at all such marriage is contracted, the court is given the power to declare the marriage invalid,[20] except when the first marriage was lawfully dissolved before the person concerned took the second wife. The Turkish Family Law (Marriage and Divorce), 1951 of Cyprus, the court is empowered to declare a bigamous marriage as invalid in all cases without any exception what-so-ever.[21] Tunisia too declared a bigamous marriage totally forbidden in the code of Personal Status of 1956. If at all someone contracted the second marriage in Tunisia, he will have to face legal penalties. One would also incur the legal penalties if one married a second wife in Iran, Iraq, and also Pakistan without seeking prior permission.

TALAQ : DIVORCE

The other law which the so-called 'reformers' thought needed change was the law of divorce. Divorce is mentioned as "most hated of the things permitted by Allah" in one of the Ahadith of Prophet Mohammad. The marriage in Islam is a contract which should be made to work as far as it is humanly possible and following the guidance of the Book of Allah and the Sunnah of the Prophet.

There are a number of devices to repair strained relations. If these do not work, it is better to bring the marriage to a peaceful end rather than dragging on indefinitely, making the matrimonial home a hell and making children suffer untold hardships. The modernists here too interferred with the Quranic injuctions and precepts of the Prophet. Changes were introduced in Turkey, Cyprus, Tunisia, Algeria, Iraq and Iran in the Islamic Law of Divorce. If a husband wants to divorce his wife, he must apply to the court of law first. A unilateral divorce is not possible. In Turkey and Cyprus, it is only the court which can dessolve a marriage as is required by Civil Code of 1926 and Turkish Family Law of 1951. In Tunisia and Algeria, the court may dessolve a marriage in pursuance of a mutual agreement between the spouses.[22] The Tunisian law has empowered the court to grant a divorce if it is insisted upon by either party.[23] Under the Iraqi Law of Personal Status of 1950, a unilateral divorce pronounced by a husband, which is neither effected by nor registered with the court, will be considered inoperative. By usurping the right of a Muslim, who happens to be adult and sane, the Indonesian and Pakistan 'reformers' have introduced the intervention of Civil Officials in the matter of unilateral divorce. It is required in Indonesia that when a divorce is desired by the husband, he shall first apply to the Consultation Bureau in the Ministry of Religious Affairs or to the Marriage Council. In Pakistan a husband who has divorced his wife shall, immediately

thereafter, give notice thereof to a local civil official who shall then constitute an Arbitration Council. The divorce shall not be effective until the expiry of 90 days from the date of the said notice.[24]

In order to impose further check on husband's power of unilateral divorce the so-called ' reform ' law in Syria, Tunisia and Morocco imposed on the husband the liability to pay to the divorced wife an additional indemnity by way of compensation.[25]

In view, these restrictions are imported from the European legal system which has not helped the Europeans to reduce the rate of divorce or maltreatment between spouses. The changes have not helped the Islamic society in any way.

TABNIYAH : ADOPTION

There is no adoption in Islamic Law. If a person adopts a son or a daughter, the Shariah will not confer on the adopted person the Status or rights of a natural son or daughter. According to the Quran,[26] if a person is not some one's real son he does not become his natural son merely by virtue of a declaration. The Turkish code lists the dategories of relationship which constitutes impediment to the marital union which includes the blood relations in the direct line as well as the relations by marriage. Adoption also features in this code as one of the impediments of marriage.[27] It was a *Sahiliyyah* practice before of Islam that a person would adopt someone's child as his own child. But adopting someone's child as one's own, the real heirs to the property of man are deprived of their shares. It is unjust and unfair practice and a great departure from the Shariah.

In Cyprus neither the fosterage nor adoption is mentioned by the Cypriot law as a bar to marriage.[28] In India, so long as a Muslim who establishes the custom of adoption does not make a declaration, he will be governed by the Customary law of adoption.[29]

APOSTACY

According to Shariah, apostacy by one of the spouses brings an end to valid Islamic marriage, but in India the Anglo-Mohammedan law provides that renounciation by Muslim wife by conversion to a different faith or otherwise, shall not by itself operate to dissolve her existing marriage.[30] The Act of 1939 does not make any change in the law relating to the effect of Muslim husband's apostac on his marriage with a wife who continues to be a Muslim. The Muslim Family Law ordinance of 1961 says that if a Muslim wife renounces Islam this in itself shall not operate to dissolve her marriage with the Muslim husband. The provision remains unchanged in Pakistan but a husband desiring to divorce his wife on the ground of denounciation of Islam would follow the requirements of the Muslim Family Law ordinance.[31]

WASIYYAH : BEQUEST

The introduction of obligatory bequest in favour of an heir has become a controversial issue for quite some time. According to the Hanbali and Hanafi schools of Islamic Jurisprudence, a bequest in favour of an heir will be considered valid provided other heirs consented to it. The Maliki school considered such a bequest as invalid while the two shades of opinion of the Shafi'i jurists support both Maliki and Hanafi views. The famous Egyptian scholars like Mohammad Abduh, Rahid Rida and Qasim Amin, while suggesting changes in certain aspects of the Shariah law in respect of Family Relations included the obligatory bequest as their solution to the problem.

Shaikh al-Maraghi, then the rector of Azhar University, also made his proposals for reform in the Family Law. As a result, the Egyptian law of 1946 stipulated that a bequest in favour of an heir is valid and effective without regard to the consent of any other person. [32] If we examine this carefully, the new law is neither in conformity with the Hanafi and Hanbali schools nor the Maliki and Shafi'i schools. *It is a departure from the traditional Shariah law.*

OBLIGATORY BEQUEST

The doctrine of representation demands that nearer relations exclude remoter relations. Hence, if a son of propositus is living at the time of his or her death, a grand son cannot claim any share in the estate left by the propositus. The orphan grand-children thus had a misfortune which could easily be remedied through *wasiyyah* or bequest up to one-third of the estate of the deceased as stipulated in the Holy Quran. But the Egyptian Law of Bequest, 1946, introduced obligatory bequest in favour of the orphan grand-children. [33] This is undoubtedly a departure from the Shariah. The Western scholars have made a hue and cry and branded the Shariah as unjust on this issue. when the Egyptian law was passed, Professor Anderson said : "*This ingenious device* does not in any way affect the structure of the Islamic law of intestate succession which it leaves completely untouched, while it yet makes provision for orphan grand-children. [34] It is not true to say that it leaves the Quranic law of succession untouched. The Syrian law of Personal Status 1953 goes a step further when it stipulates in respect of obligatory bequest as follows : "The grand-children shall not be entitled to any obligatory bequest if they otherwise inherited from their father's ascendants nor if any of them left a legacy or a gift which is equal to an amount of that of the obligatory bequest. But then it confuses the issue and goes contrary to the Shariah when it ways that "where a man has less than the due obligatory bequest, the balance shall be made up. [35]

The Tunisian code has also enforced the principle of obligatory bequest but the benefit is available only to the first generation of grand children, male or female.[36] The Moroccan code of Personal Status of 1958 stipulates that where a person dies, his son having died before or with him, bequest of an amount laid down in the following articles shall be binding on him from a third of his estate

in favour of the grand-children, if any. The amount of such a bequest shall be equal to the share which their father would have received if presumed to have died after the deceased, provided that it shall not exceed a third of the estate.[38] Pakistan has also introduced the so-called reform on the obligatory bequest by introducing the presumptive share of a child who is dead at the time when succession is to be shared per *stirpes* by its own issues living at that time. One wonders what would happen if the surviving issues happen to be girls! This is an example of twisting the Shariah in order to accommodate one's immaginations.

" WIDOW'S LIEN "

A widow after her husband's death was given a privileged position in regard to her claim for unpaid *Mahr* against her deceased husband's estate. Under the Shariah, widow in such circumstances ranks, as one of the creditors and receives the unpaid *Mahr* before the shares of the inheritance are given to the appropriate heirs. But the Anglo-Mohammedan law in India gave the widow special privilege to her claim since it was comparable to what obtained in the English law as " a widows's lien ". She was allowed against the Quranic law to retain possession of her husband's estate.[39]

These are some of the examples of changes effected in the Divine Law. Surprisingly enough, the modernist, reformers' call these changes based on the muth of Neo-I jtihad. In my view, there only exists the process of *Ijtihad* which was employed by the *sahabah, Tabiun* and *Tab, Tabiun* who solely depended on the exercise based on the Quran, Sunnah and the conduct of the companions of the Prophet. If one begins to term one's mere imagination in reinterpreting the principles of Shariah as *Neo-Ijtihad,* he is really quilty of changing the Divine Law.

ARE THE ' LAW REFORMS ' REALLY REFORMS OR DEVIATION FROM SHARIAH ?

While examining all the ' reforms ' in all aspects of Family Law of Shariah, it becomes quite evident that the reforms are truly speaking a departure from the Divine Injunctions contained in the Quran and the Sunnah of the Prophet.

The Holy Quran has warned those who fail to apply the Shariah in the following strong words :

" ومن لم يحكم بما انزل الله فاولئک هم الفاسقون "

"And if any fail to judge by the light of what Allah has revealed, they are no better than those who rebel ".[40]

" ومن لم يحكم بما انزل الله فاولئک هم الظالمون "

"And if any fail to judge by the light of what Allah has revealed, they are no better than wrong-doers."[41]

"ومن لم يحكم بما أنزل الله فأولئك هم الكافرون"

"And if any fail to judge by the light of what Allah has revealed, they are not better than unbelievers."[42]

Besides, man-made laws, as we have seen are restricted by the current needs of individuals and societies, and they change in accordance with the evolution of the society. The more sophisticated the society becomes, the more need for new laws is felt. The new legislation is usually enacted by the rulers or government or assemblies who rectify and change laws when they feel it is necessary. Thus, one society creates the laws and enacts them in view of meeting its own requirements which may not be applicable to other society. Such laws become subordinate to men and their further evolution depends on him. But, the objective of Shariah is to organize and direct the society, to cultivate the right kind of individual and to establish the ideal state and the ideal world. It is for this reason that its provisions are much more in advance of the standard of societies at the time they were inspired. It is my candid belief that they are still ahead of our contemporary conditions. Allah in His Kindness and mercy has saved searching humanity much unproductive strain by revealing the Divine Law orienting people to do good deeds and lead virtuouslife and toward achieving exaltation and human prefection.

As we have noted before, the Shariah was not revealed for limited application for a specific age. It will suit every age and time. It will remain valid and shall continue to be, till the end of this life of on earth. Its injunctions were coined in such a manner that they are not affected by the lapse of time. They do not become obsolete, nor do their general principles and basic theories need to be changed or renovated. The genelalized construction and elasticity of Shariah allows even for bringing under their jurisdiction any unprecendented new case, even though it was not possible to expect its occurence at the beginning of revelation. Hence, the provisions of Islamic jurisprudence are not susceptible to change or substitution as are other laws and legislation.

This is the reason why any deviation from such comprehensive code would be subject to Divine indictment :

"....Then is it only a part of the Book that you believe in, and do you reject the rest ? But what is the reward for those who among you behave like this but disgrace in this life ? And on the Day of Judgement they shall be consigned to the most grevious penalty".[43]

SIYASAH SHARIYYAH AND THE QURANIC CONCEPT OF "THOSE IN AUTHORITY"

At the very orteet, it should be borne in mind that Islamic Laws and rules are of two categories : The first consists of *Ahkam* or legal injuctions set down for religious and spiritual purposes. These include the rules of faith and worship.

The second category comprises the rules and laws administering and organizing the state, the government and the community, as well as the relations between individuals and their communities. These includes the rules of human behaviour, criminal laws, laws of civil status, constitutional laws, international laws, etc. Thus, Islam combines the secular and the spiritual. It is a religion that embraces spiritual and secular life simultaneously. As faith and belief are one part of Islam, the government is the second integral part. Caliph 'Uthaman Ibn 'Affan had trully expressed this fact by saying, "Allah urges by the Ruler what may not be urged by the Quran". But, such ruler must be pious (*Muttaqi*) and Allah-fearing who tries to base his pronouncements on the teachings of Islam.

The Islamic laws are often changed using the technique of *Siyasah al Shariyyah.*

Siyasah literally means politics and *Shariyyah* means something that concerns the Shariah. It is a technique through which certain so-called reforms were introduced in Shariah as an escape from the application of strict Shariah principles. Under the guise of *Siyasah Shariyyah*, certain Muslim states have tried to abandon the principles of Shariah law not by express supersession but by directing its courts that they shall not entertain any case based on such principles. In the course of time, these Shariah principles became obsolete.

When some Muslim states tried to apply reforms under the pretext of *Siyasah Shariyyah* they maintained that they were acting in conformity with the following Quranic verse :

"يا ايها الذين آمنوا اطيعوا الله واطيعوا الرسول واولى الامر منكم."

"O You who believe, Obey Allah and obey the Apostle of Allah and those who are placed in authority among you".44

The question, however, arises as to who are the people in authority referred to in the Quranic verse: Are they political leaders and statesmen ? Certainly not. It is likely that there may come up some so-called Muslim rulers and leaders who may be victims of various vices and may impose regulations which may go contrary to the Quran and Sunnah. Should we obey them simply because they are placed in authority over us ? The Sunnah of the Prophet guides us in such situation in the following words :

"لا طاعة لمخلوق في معصية الله."

"There is no obediance due to any creature (no matter who they are) if they order to sin against Allah".

The Prophet has also said : "He who commands you to sin, has no authority over you".

In reality, in the sphere of law, "those who are places in authority" will mean those 'Ulama and Fuqaha who have authority in knowledge of the Book of

Allah, Sunnah of the Prophet and the conduct of the *sahabah*, the companions of the Prophet.

It is a bitter fact that majority of those who popularised this concept of *Siyasah Shariyyah* in the Muslim world happen to be the Egyptian *Ulama* who are respected throughout the world because of their association with Al-*Azhar*, and ancient seat of learning in Cairo.

But, during the colonial period these *Ulama* were the first, who supported the so-called 'modernisation' of Egypt and even Islam by their rulers.

It will not be out of place to discuss here the fact that though Shariah confers upon the ruler the right to legislate, this right is not absolute. In fact, it is a right restricted to this condition : that whatever the ruler may legislate must be compatible with the texts, spirit and general principles of the Shariah. Consequently, such a restriction confines the right of legislation to two categories :

(*a*) Executive legislation, intended to guarantee the implementation of the provisions of Shariah. In this case, legislation takes the shape of rules and regulations similar to those presently issued by government officials in the course of their daily responsibilities, for the purpose of ascertaining the execution of the relevant laws.

(*b*) Organizational legislation, intended to organize the society, protect it and meet its needs in accordance with Shariah. Generally, such legislation is not called for except in such cases where there are no relative provisions in Shariah administering them. In any circumstance, legislation by rulers must be in harmony and in agreement with general principles and the spirit of the Shariah. It is the *Ijmac* of the '*Ulama* that all acts of the ruler are legitimate so long as they are within the framework of Shariah and compatible with its judicial decisions and spirit. Then, and only then, would the ruler be acting within his rights and accordingly, should be obeyed. However, if he acts otherwise, issuing laws which contradict the Shariah, his acts or laws become illegitimate and objectionable. This statement is based on the Quranic verses :

"0 you who believe, obey Allah, and obey the Apostle and those placed in authority among you. If you differ in anything among yourselves, refer it to Allah and His Apostle."[45]

"Whatever it be wherein you differ, the decision thereof is with Allah".[46]

In most of the Islamic countries, since the last century, rulers have been formulating codes of laws in the various legislative matters on the same pattern as that followed by European countries. As a matter of fact, they copied European constitutional, criminal, civil, commercial and other codes without reference to Islamic jurisprudence except in a few minor matters such as Waqf and the like. It is only fair to admit that many of these codes do agree with the basics of Islamic

jurisprudence and do not contravene its general principles. But it is only fair as well to state that some of these codes run contrary to our jurisprudence and have been established on principles opposed to it. For instance, certain of the said codes allow adultery in most cases and consumption of alcoholic beverages while Islam categorically prohibits both.[47]

ENFORCEMENT OF NIZAM-MUSTAFA : A RIGHT STEP IN RIGHT DIRECTION

The present development in the Muslim world augur well for the new century of Hijrah. There are some Muslim countries in which efforts are being made to enforce the Shariah. The enforcement of Nizam-e-Mustafa in Pakistan is a fine example.

While one is happy about this development, there is still need for cautious optimism. As President *Zia-Ul-Haq* had said on the eve of introduction of *Nizam-e-Mustafa* or Shariah law, efforts have been made to reform the society which is exposed to complascancy for a very long time. The preamble of the prohibition (enforcement of Hadd) order 1979 reads : " that it is necessary to modify the existing law relating to prohibition of intoxicant so as to bring it in conformity with the injunctions of Islam as set out in the Holy Quran and the Sunnah".

Hadd and *Tazir* punishments are to be accorded according to the Shariah. The offence against property (enforcement of *Hudud*) ordinance, 1979 says in respect of punishment of theft liable to *Hadd* : (1) Whoever commits theft liable to *Hadd* for the first time shall be punished with amputation of his right hand from the joint of the wrist. (2) Whoever commits theft liable to hadd for the second time shall be punished with aputation of his left foot up to the ankle. (3) Whoever commits theft liable to *hadd* for the third time, or any time subsequent thereto, shall be punished with imprisonment for life.

These are loudable attempts and we hope that these laws, once fully implemented, will reform the society. In respect of the offence of *Zina* (enforcement of Hudud) by Nizam-e-Mustafa ordinance No. VII of 1979 gives the following punishment if it is proved that the crime was really committed : A person guilty of 'zina or '*zina-biljabr*' shall if he is not an adult, be punished with imprisonment of either description for a term which may extend to five years, or with fine, or with both, and may also be awarded the punishment of whipping not exceeding thirty stripes : Providded that, in the case of '*zina-bil-jabr*' if the offender is not under the age of fifteen years, the punishment of whipping shall be awarded with or without any other punishment. However, the punishment for *Zina* does not seem to be according to the requirements of Shariah. Perhaps, the government of President *Zia-ul-Haq* is cautious knowing the weakness of the society where the *hadd* punishment of Shariah has not been applied for a very long time. It was, perhaps, intended not to arouse public sentiment against the Shariah. Whatever may be the case the punishment cannot be properly termed as the Shariah punishment.

TAKHAYYUR : NEED FOR THE MODERN ISLAMIC SOCIETY

Takhayyur literally means choice. In the language of *fiqh*, it means liberty of an individual Muslim to be governed by the law of any of the four schools of Islamic jurisprudence. As opposed to *Takhayyur* is the concept of *Taqlid* that is following strictly the law of the school on which one is born. In other words, one who is born in a Hanafi home follows strictly the Hanafi laws and in a Maliki home follows the Maliki Laws. The moment that one begins to exercise his liberty to be governed by the law of another school than his own, usually there is hue and cry. Some people begin to call him *Ghair-Muqallid* (unorthodox).

The Muslim countries have now come closer to each other due to the modern means of quick transport. The newly found oil wealth in some Muslim countries have attracted Muslims following different schools from other parts of the world to travel and work and live in those countries. Thus, it has increased a great deal of inter-change of ideas among Muslims Living in different parts of the world. *Takhayyur*, hence, offers a solution in a case of conflict of law. The doctrine of *Takhayyur* is not a new one. In the first place there was nothing like any particular school of law in the time of Prophet Muhammad, the four *Rashidun* Caliphs as well as the early *Tabi'un*. Opinions on minor issues differed even during that time but according to the Prophetic traditions they were considered as "Differences of opinions among may *Ummah* is a sign of the mercy of Allah". Even the great Imams themselves, loved each other and accommodated each others point of view. Why should then the doctrine of *Takhayyur* not work in the modern world of ours? Just as we did not call the early Muslims as *Ghair Muqallid*, we have no right to brand the present day Muslims who exercise their right of *Takhayyur* either *Muqallid* (the person obliged to follow authorities of the school in which he is born) or *Ghair-Muqallid*.

If this is achieved, *Shari'ah* will be more easily acceptable and practicable all over the Muslim world. To some extent the gap has been bridged as the principle of *Takhayyur* has assumed greater importance in modern times, but still many *Qadis* all over the Muslim world are not well disposed to apply the laws of other schools. The result of *Takhayyur* will provide a harmonious and easy process of justice since the founders of all the schools of Islamic Jurisprudence, in reality, had no goal in front of their eyes-the welfare of the *Ummah*. Thus, *Takhayyur* can bring about *Talfiq* which literally means piecing together or patching up through combination and fusion of juristic opinions of diverse nature. But, in all these processes there should not be allowed any departure from the spirit of the teachings of the Qur'an and the Sunnah. *Takhayyur* and *Talfiq*, therefore, will bring about the reforms necessary to suit the modern conditions. In this case, one will not be driven to English, French or German legal systems and borrow from them in order to find a solution to our legal problems. Any attempt of *Ijtihad* to re-interprete the Islamic legal principles with the use of

Takhayyur and *Talfiq* to suit the changed social conditions of our time will not objected, but mere change and departure from the Qur'an and Sunnah in order to import French, English or Italian law and call it *neo-Ijtihad* will amount to disbelief.

The Qadi, once *Takhayyur* is accepted, will be at liberty to apply an opinion other than that of the school to which they were traditionally bound. *Takhayyur* is applied in the Suddan by the Sudanese Mohamedan law courts organisation and Procedure Regulation.[1] Truly speaking, a lots of problems will be automatically solved if the *Ummah* in the present times understands the importance of the concept of *Takhayyur* and if its voluntary application is left to the *Qadis* of proven ability, knowledge, maturity and above all *Taqwah*, fear of Allah.

The modern courts, in many Muslim countries, where the Judges are either non-Muslims or a Muslims trained in common law with marginal knowledge Islamic law cannot be entrusted with this grave responsibility. A truly learned *Qadi* in Islamic Jurisprudence, as propounded by the four schools of *Fiqh*, will endeavour and make an electic choice between the corresponding legal principles of the various schools and will enforce one of the solutions given by various great Muslim Jurists. He may even chose a lesserknown juristic view over a well-known principle provided it will help the cause of equity and justice on which the Shari'ah lays a great emphasis.

The Shari'ah, particularly its application in public law, has been so much out of use for such a long time that people feel scared at the thought of bringing it back as a living system of law which can be practised today. Their attitude is like that of a misguided and emotional father who gives his ailing son suffering from typhoid the solid food thinking that he will be cured quickly and get quick energy. He only laments when his child eventually dies. During the colonial period, even some learned *Ulama*, like Shaikh Muhammad 'Abduh of Egypt, became victims of inferiority complex and called their obnoxious imaginations as intelectual re-interpretation of various Shari'ah issues and called it fresh *Ijtihad* or *neo-Ijtihad*. It is really very unfortunate that some Muslim scholars during their stay abroad and while working on their doctorial dissertations accepted this new and unislamic term as a newly found treasure.

It is really a pity that most discussions on common law system *vis-a-vis* the Shari'ah are conducted in a haze of misinformation : There are few areas of so-called controversy between the application of the *Hadd* punishment in the Shair'ah so much of what everyone "Knows" is not really so.

It is therefore, a duty of every Muslim to disseminate the knowledge of Shari'ah both among Muslims as well as non-Muslim all over the World.

The risks of re-introduction of Shari'ah in Muslim Countries are very much less than its critics allege, and indeed would be sufficient ground for its rejection if the amalgamated Anglo-Mohammedan system had fewer risks than the Shari'ah. But, their anti-Shari'ah lobby, for example in Pakistan, where Islamic Law was

recently introduced created a hue and cry. The bureaucratic elites had acquired bad habits like drinking alcohol and the western style of life. If Shari'ah were to be fully implemented, they would face great hardships. Even they enjoined the blessings of the past regime and even before that period the past rulers had similar vices. Anyone who genuinely wanted to carry out the Islamic system had a marathon task ahead of him since the first opposition that he would face would come from these 'brain-washed' elites. This case-study of Pakistan holds particular relevance for other Muslim countries who wish to tread on this ardous path.

At present, there is wide spread though not complete support for the Shariah by Muslim masses everywhere. But, because of the wrong propaganda against Shari'ah that once it is fully brought into practice, streets of the Muslim world will be flooded with people whose hands are cut-off, or scenes of stoning to death and flogging in public will be witnessed frequently. Because of these imaginary dangers many Muslims 'elites' advocate to continue the 'more human' system of the common law.

Clearly there is only one well-defined path for Muslims in the fifteenth century of Hijrah. While countries can make technological advancement and learn modern techniques from the western world or wherever they are available, it is clear that each Muslim country will have to make real efforts to re-educate the Muslim masses concerning the Islamic value system, and make them aware of the fact that the Shari'ah can operate even in the modern so-called 'advanced' society of ours.

The colonial era has pumped a wrong notion in the minds of Muslim intelligentia that Shari'ah is outdated and cannot fit in the modern society of ours. What is really needed on the part of all Muslims is a sense of dedication, fear of Allah, sincerity of purpose and the easily forgotten fact, which Islam so much emphasis, the life after death and the Day of Resurrection and the Day of Judgement. In order to better our lives in this world as well as the next world, there is no other course open to us but to readopt Shari'ah.

In conclusion, I would like to quote the message of Shaikh 'Abdul Qadir Audah to the Muslim scholars to awaken them from their deep slumber.

"Muslim scholars for long have disregarded their Islam. They have never censured any attitude violating Islam, nor tried to repeal and revoke any injunction that can contrary to the principles of Islam. They have never even convened a meeting to encourage the reinstitution of Islamic jurisprudence. Rulers have committed felonies, allowed the forbidden, shed blood, raped women, spread mischief and transgressed the limits enjoined by Allah, while the scholars have never so much as expressed indignation and opposition to such actions. They uttered only the sounds of silence, as if Islam did not require them to invite others to do the good and to forbid what is wrong (*Amr bil Ma'ruf wa Nahya anil Munkar*) and did not make it incumbent upon them to give counsel to the rulers so that they might apply the laws of Islam. Man-made laws have been enforced

in Muslim countries, though they [illegible] restricted Islamic provisions, nullified Allah's commands, allowed what Allah has prohibited and prohibited what Allah has allowed. Yet, Muslim scholars were not disturbed by this violation of their religion nor were they perturbed about their own future, though they earned their living at the expense of Islam.

They did not even hold meetings to discuss the tragic turn of events relative to their own destiny and the fu'ure of their relegion".[1]

We sincerely hope that the fifteenth century Hijrah which has brought new challenges, and opportunities to the Muslim *Ummah* will establish Islam as a soical, political, economic and moral reality which it really is.

FOOT NOTES

1. Quran, ch. 5 : 36.
2. Quran, ch. 2 : 19.
3. Quran, ch. 2 : 178 ; ch. 4 : 93.
4. Coulson, A History of Islamic Law, Edinburgh 1971, p. 157.
5. Coulson, N.J., A History of Islamic Law, *op.* cit., p. 149.
6. Coulson, A History of Islamic law, *op.* cit., p. 149-150.
7. See The Islamic laws (Enforcement of *Nizam-e-Mustafa*), Lahore Law Times Pubications, Lahore 1979.
8. *See* Tahir Mahmood, *Family law Reform in the Muslim World*, New Delhi, 1972, pp. 270-272.
9. Fundamental Law of Hejaz, *see* articles 5-6.
10. Smith W.C., *Islam in Modern History*, New York 1963, p. 166.
11. Quran, ch. 2 : 221.
12. Turkish Family Marriage and Divorce Act 1951, section 7, 1C.
13. Ottoman Law Family Rights in 1917, Article 52—58.
14. Quran, ch. 4 : 3.
15. Iranian Family Protection Law 1967, article 14 ; Iraqi law of Personal Status of 1959, art. 3 (iv).
16. Iraq Law of Personal Status of 1959, art. 3 (iv).
17. Pakistan Muslim Family Law Ordinance 1961, section 6.
18. Dissolution of Muslim Marriage Act 1939, section 2 (ii).
19. Turkish Civil Code, 1926, article 93,
20. *Ibid.*, article 112.
21. *See* section 8 and section 19.
22. Tunisian Code of Personal Status 1926, art. 30 ; Algerian Marriage Ordinance 1959, article 6.
23. Tunisian Code of Personal Status 1956, article 31.
24. Muslim Family Laws Ordinance 1961 of Pakistan, section 7.
25. Tunisian Code of Personal Status 1956, article 31 ; Syrian Law of Personal Status 1953 article 117, Moroccan Code of Personal Status 1958, article 60.
26. Quran, ch. 33 : 4-5.
27. *See* Turkish Code, article 92.

28. Turkish Family Law 1951, section 7.
29. Muslim Personal Law (Shariah) Application Act, 1937, section 3.
30. Act of 1939, section 4.
31. Dissolution of Muslim Marriages Act, 1939, section 4.
32. The Egyptian Law of 1946, article 37.
33. Law of Bequest 1946, art. 76-77.
34. Anderson, Recent reform in the Islamic Law of Inhteritance 141 CLO 1956 pg. 3580.
35. The Syrian law of Personal Status, 1953, section 2575.
36. The Moroccan Code of Personal Status, 1958, Article 266-267.
37. *See* Fyzee, A.A.A., *Ou tlines of theMohammedan Law*, Oxford 1955.
38. Quran, ch. 5 : 50.
39. Quran, ch. 5 : 48.
40. Quran, ch. 5 : 47.
41. Quran, ch. 2 : 85.
42. Quran, ch. 4 : 59.
43. Quran, ch. 4 : 59.
44. Quran, ch. 42 : 10.
45. ' Audah, Abdul Qadir, *Islam Between Ignorant Followers and Incapable Scholars*, I.I.F.S.O. Publication, Kuwait, 1971.
46. The Sudanese Mohammedan Law Courts Organisation and Producer Section 53.
47. Audah, Abdul Qadir, *Islam Between Important Followers and Incapable Scholars*, I.I.F.S.O. Publication, Kuwait, 1971, pp. 105—108.

III

CONTRIBUTION OF ISLAM TO CONSTITUTIONAL LAW

by

ISMAIL SUNY*

I. DOCTRINE OF SOVEREIGNTY

Sovereign and *Sovereignty* which in the Indonesian Constitutional Law translated to "berdaulat and kedaulatan" (from Arab language "daulah"), have gone through many changes due to the development of the centuries. These words come from the state and low doctrine in the Middle Age France. "There the sovereignty is not only meant to the King, but also for the *Baron* who in his baronie exercises the mandate and representation of the said King. Therefore Sovereign constitutes the comparative meaning, originated from *Superanus* or *Superior*. In the further development, the power of the King becomes more stronger, and the meaning shifts to become Superlatif (Supremus), so thus only the King at that time remains Sovereign.[1]

Many centuries before Jean Bodin (1530—1596) who for the West is considered the first man to state the sovereignty is compact cannot be divided, its orginality as the highest power and fullest power which is limitless, Islam has confirmed in the S. Al Ikhlas paragraph 1—4:

"In the name of Allah, the Most Beneficent, the Most Merciful.

(1) Say (O Muhammad): He is Allah (the) One.

(2) Allah, the Self-Sufficient Master, Whom all creatures need.

(3) He begets not, nor was He begotten.

(4) And there is none like unto Him."

If Allah is to who all depend, then all sovereignty, from human (individual) sovereignty, state sovereignty, people sovereignty up to the law sovereignty should submit and subject to the Allah sovereignty. In other words: All kind of sovereignty up to the law sovereignty are limited, not absolute. The absolute and full sovereignty is the sovereignty of Allah. Then by the consent and Allah leadership all kind of sovereignties which are limited, may fully exist with great enthusiastically provided that within the consent and Allah leadership mentioned not in contrary to the sovereignty of Allah.[2]

For the religious man the real sovereignty cannot be found in the society. The real sovereignty is owned by God Almighty, while the power or authority which we must implement is a sacred trust, a mandate which properly within the limits of the will of God Almighty. Therefore it is correct if the Preamble of the Indonesian Constitution recognized the sovereignty of God with the words: "By the grace of God Almighty......then the Indonesian people

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[illegible]). The [illegible] sovereignty as the highest authority constitutes one of the Sila (principle) Pancasila, the State foundation of the Republic of Indonesia.

The Council of People Representative is the implement or of the G Almighty sovereignty, which shall create law in the society. [3] Thus in the sy tem of the Indonesian Constitution shall meet together the doctrine of G Almighty sovereignty, people sovereignty and law sovereignty, not as in the oth state where each doctrine is in contrary one to each other. Surely in the mea ing that the three kind of sovereignties are not of the same degree". [4]

II. THE BASIS OF THE STATE

1. According to the late Abul A'la Maududi the Islamic constitution system is based upon the tauhid principle (the God Almighty). Tauhid mea that only God Almighty the Creator, Maintainer, and the Ruler of the Unive (Universum) and of all its contents, organic as well as inorganic. The sov reignty over this mamiakah is in the God Almighty. Only God Almighty has t right to give order and to prohibit.[5]

Sila of God Almighty which becomes the basis of the State of the Repub of Indonesia has been for many centuries confirmed in the Al Quran S. An Na paragraph 22 :

> " Your God is One God (Allah). But as for those who believe not the Hereafter, their hearts deny (the faith) and they are proud ".

This paragraph gives one phinciple that God is Almighty and only to Hi human being shall request for help.[6]

2 That the Constitutional Law should imply the contents which order t government and the other state implementor to maintain the sublime moral asp ration of the people. Furthermore in Islam this is categorized as " Fardh acldaqiyah " (moral obligation) a part of the fardhu'ain, of the most importa and most influential in the state life is the aqlak (moral obligation) which h been ordered to as by Allah to implement it properly.[7]

The Sila of Just and Moral Humanity, which becomes the basis of the Ind nesian State has been for many centuries mentioned in the Al Quran S. An Na paragraph 90 :

> " Verily ! Allah enjoins justice, and the doing of good, and giving (hel to kith and kin and He forbids all great sins and all that is deni by the Islamic Law (Munkar), and (kinds of) oppression. I admonishes you, that you may take heed. "

In this paragraph the just action which means to give someone the ri properly connected namely by doing good which means to give more right th

sary. The highest good is to reward bad with goodness. While the foal 1 and denial action which follows lustful passion and despotic are not l actions. [8]

3. In the establishment of state is accepted the term unitary state, the state 1 protects and covers all the nation in total. The State above all group of ons, above all individual opinions.

Third Sila of the Republic of Indonesia has been indoctrinated by Islam al centuries ago, in the Surat Al Imran paragraph 103 :

"And hold fast all of you together to the Rope of Allah (*i.e.* this Quran) and be not divided among yourselves ; and remember Allah's favour on you, for you were enemies and He joined your hearts together, so that by His Grace you became brethern ; and you were on the brink of the Pit of Fire, and He saved you from it. Thus Allah makes His Signs clear to you, that you may be guided".

This paragraph confirm the necessity for unity and prohibits splits use by unity shall be formed a strong power. State shall not develop with-mity between its citizen, although they are of different race and religion strong unity shall only be achieved if strongly belief in the religion of God ghty. [9]

4. Very view of the state leadership who are dare openly to state that do not accept democracy although in practice they do not implement it. ly every state, whatever of its political system, claims that its state based eople sovereignty, based upon democracy and representative consultation.

The fourth Sila of the Republic of Indonesia which stipulates democracy eadership by the grace of wisefulness in the consultations|representative, has the doctrine of Islam as from its development 1400 years ago.

As has been known to us, it is deliberately that the syariah does not pro- detailed regulation for all our social requirements which are many and ging. Therefore it turns out by itself, that it is necessary the existence of continuous worldly laws. These worldly laws should concerned with many ic governmental problems which are not being touched (regulated), by the ah, and the problem concerning syariah which only giving the general iples and not detailed laws. For these two group problems, jamaah should the appropriate and detailed law by using the free ratio (ijtihad) in comply the spirit of Islamic laws and with the real interest of the nation.[10]

Principle of consultation, is taken from the Arab language "Syawara" and syawara", have been the Islamic principle since the seventh century masihyah he word of Allah in the Surat Asy Syura paragraph 38 :

"Who (conduct) their affairs by mutual consultation".

This clear command should be consider as the fundamental part of the Islamic state system. This imply the meaning, that the legislative power of the state should be left to the council specially elected by the society for that purpose. [11]

5. To establish a social justice for the whole people is an important command in the establishm t of a state.

The conflict between an individual and jamaah constitute a most important problem in the modern age which have caused many problem in other fields. At the present moment we witness a conflict in the field of law and economy which has been in process between the problem of individual and authority and his rights in one side, against jamaah with its rights and authority on the other side. The main problem is concerning the relation and the balance between the right and authority each respectively.

Then arises the pattern of two pole international ideologies which continuously conflicting in the field of politic, of economy and sometimes on the name of personal freedom and sometimes on the name of the poor people. The slogan used in the conflict is so sharp, thus making us difficult to know the real substance. however we can still refer partially of it which are not too extraordinary. Socialist block centralized its effort for the interest of jamaah has neglected the individual matter and nearly do not recognize the existence and not allowing an individual to get the fruit of his great effort and what is more being taken away from the self respect and from his most part of his human rights. During the process of making laws for the member of the society, and later has succeeded to protect them from the danger of unemployment, at that same moment also they are being robbed from all political rights, social and individual rights of every person, and their activity being curbed with the reason in order not to be misuse contrary to the interest of jamaah, although the individual activity can be still be utilized for the benefit of many person. When the socialist block done they definitely have caused loss at the expense of the society itself thus causing the area of agriculture production and industry declining because there is no individual pushing power.

On the other hand the block named Free World execessively protect the freedom of individual rights and respects, so that sometimes they close their eyes toward excessive action of some individual in the using of their rights causing losses to the jamaah. This block places individual in the same level as Jamaah, but only pays attention to the individual political rights by neglecting at all the economic rights and does not give firm guarantee (as have been done by Socialist Block) on the food and clothing.

Although the political struggle between two block still in process, however the separation line begins to become narrower. The Socialist Group based upon their bitter experiences has begin to give to an individual a part of his owner-

ship and has also abandoned the concept absolute equal share and equal taste in the field of property between each person. While the Free World (within the effort to contain the danger of communism) begins to check the greediness of some individual, namely by issuing some regulations and laws which limit the absolute "ownership" and unlawful trade competition and then to make bigger social justice fences around the individual, which can protect him from the unemployment danger and the problem of poverty and diseases.

The separation line shall continuously become narrower day per day and the two blocks at one moment they shall unit, thus our world shall be regulated by a single system which maintain and utilized the individual respects and rights for the benefit of many people without surpassing the limit of general interest which shall remain to become the main goal.

The single order system of our world as mentioned above according to Minister Ahmad Zaki Yamani, shall at a one time in the future occurs and shall constitute a copy of its original namely the Islamic system which was based since the last 14 centuries which make the jamaah as only holy fence, of the individual, active and endeavours within the holy fence without colliding between the one with the other in doing their own activities and without the intention to tresspass the joint fence and if someone tries he shall fall and the fence shall remain standing firm. [12]

The Sila of Social Justice which becomes the state basis of the Republic of Indonesia has been mentioned in Al Quran Surat Yunus paragraph 55:

> "No doubt, surely all that is in the heavens and on earth belong to Allah".

and with the word of Allah in the Surat Annur paragraph 33:

> "And give them something yourselves out of the wealth of Allah which He has bestowed upon you."

Dequit who has written theory "ownership shall have social functions" is a French law scholar who has stayed for some time in Egypt, in that city he carries out an extensive research concerning Islamic Syariah. Although there is no absolute similarity between theory of Dequit with the Islamic collectivism concept, however there is also many among the Dequit analysis remind us of, the Islamic follower to Islamic syariat. [13]

By studying the sovereignty doctrine and each sila of the basis of the State of the Republic of Indonesia, consequently we can justify the thesis which says that Pancasila is the partial of the ground principle of Islamic doctrine itself, which consequently we follow as the absolute part of the Religion Doctrine", [14] Islam.

Therefore the problem of Pancasila for the Islamic followers is not t lem of amendments and its substitution, but rather more lies in its imp tions.

FOOT NOTES

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2. *Op. cit*, p. 74-78.
3. *See* my book *The Mechanism Democracy of Pancasila*, Jakarta, Aksara Baru, 1978 er
4. *See* the opinion of Dr. H. Abdoerraoef, *Al-Quran and Law Science*, A Comparati Jakarta : Bulan Bintang, 1970 p. 205.
5. Abul A'la Maududi, *Principle of Muslim Way of Life*, Jakarta, Bulan Bintang, 19
6. *See Reflection of Al Quran upon the Life Pattern of Indonesian Nation*, Jakarta : Hg cation on the Science of Al-Quran, 1980, p. 1.
7. Prof. T.M. Hasbi As-Shiddeqy, *State Science in the Islamic Fiqih*. Jakarta : Bulan 1971, p. 99-101.
8. *The Reflection of Al Quran upon the Life Pattern of Indonesian Nation*, Op. cit. p. 7-
9. *The Reflection of Al Quran upon the Life Pattern of Indonesain Nation*, Op. cit. p.
10. Muhammad Asad, *The Printiple of State and Government in Islam*, Berkeley, Uni California Press, 1961, p. 52-53.
11. *Op. cit*. h. 54.
12. Ahmad Zaki Yamani, *Islamic Syariat and the Problem of Nowadays*, Jakarta, The In of the Social Sciences Study Yayasan Bhinneka Tunggal Ika, 1977, p. 37—60.
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LAW, POWER AND JUSTICE IN THE LIGHT OF ALQUI

by

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Bismillahirrahmannirrahim.

Cicero, a well-known Roman lawyer and politician, who lived in the century B.C. said " Ubi societas, ibi ius " [1], which means : " Where there society, there is a law ".

This opinion is but a half truth, because of the fact, that law has to dc merely with human society, but with the whole nature as well.

It is a problem of a classic nature, whether or not a real relationship does between the law, which has to do with the whole nature and the law, which gov the human society. And problems of the relationship between natural law positive law had indeed dominated all legal thoughts ever since. Concept natural law arises particularly if injustice occurred in the human society.

These concepts of natural law dated back to the 5th century B.C. of the G period, when the city of Greek had reached the highest state of developn politically, socially as well as spiritually. Political problems and their social had formed reflections among their thinkers o law and order.

Natural law in this sense is not a law, which governs the nature in the phy sense of the word as it is understood in the natural sciences. It is a law, whi not made by man, but effectively influences the human law and in fact gover the highest degree and at the last instance.

Heraclitus, one of their famous thinkers who lived in the 5th century had searched in the essence of " being ". He had found it in the raythm of eve

He looked at the nature not just as a substance, but as an order of thing well. Law frequently changes in the democratic republics. The human elem and the changes behind the law became visible. And man began to think al the reason of the validity of law. In this case, reflections about nature as an o of things could be fairly utilized.

In his Antigone, Sophocles (496—406 B.C.), came to conceive of nat (God made) law as opposed to positive (man made) law. God made law is regar as wise, while man made law arbitrary.

Aristotle (384—322 B.C.), whose thoughts having very much inspired Western philosophers such as Kant, Hegel, Kelsen and many others, looke the world as one totality comprising the whole of nature. Man is part of the wh nature with twofold sense : on the one hand he is part of the matter or part of

creatures of God and as such, he partakes of experience, but on the other hand man is also endowed with active reason, which distinguishes him from all other parts of nature.

As such he as capable of forming his will in accordance with his insight of his reason. [2].

Aristotle had indeed distinguished between natural law and positive law, but he did not oppose it one to the other. He even regarded natural law as part of the positive law itself, be it written or unwritten.

Now, what distinguishes natural law from positive law ? Aristotle assumes, that there are rules of law, the content of which cannot be freely determined by man *i.e.* the legislators. There are many factors outside the legislature, which should be fairly taken in to consideration as to prevent the legislature to come to conclusions contrary to the aspirations of those outside it.

Consequently, law cannot arbitrarily be determined by man, but is prescribed for him by circumstances so that the legislature can only declare what is recognized as being necessarily prescribed by circumstances [3].

It is with this understanding that Aristotle declared natural law as part of positive law and it is rightfully understood therefore, that law could be found in the rhythm of events. He becomes the harmony of the aspirations of man. Law does not become a striking force from outside. Instead he grows from the bottom of the conscience of man itself.

Law is not, as Plato (427—347 B.C.) sees it, what benefits the mighty but rather as something which is acknowledged as being necessary by all men, because they indeed can take benefit from it.

If a legislature does not take the people's aspirations into their consideration, the positive law would be in an opposing position to the natural law.

A legislative body, which is empowered with certain authorities in conformity with the fixed procedures, would certainly make all the legislative products into effect. Without compulsory force, law means nothing and in these chain reactions, one can see the close relationship between law, power and force.

In this connection, it is worthwhile to mention something about power politics. Politics and power politics have in fact the same meaning due to the fact, that there is no politics without power, be it in a democratic nation or in a dictatorial one and logically there is no power without force.

"But unfortunately however, the term power politics is used for a special type of politics, namely that in which power is separated from justice and love and is identified with compulsion", says Paul Tillich. [4].

And if power to compel the effectivity of the law is separated from its relation with justice, it in fact destroys the power itself and the politics based on it. Talking on justice is indeed not without truble. Discussions on this problem had taken place since centuries. Despite of the failures, man never ceases to search for and even always longing for justice. And therefore, despite of the fact, that searching for justice means always a hard struggle, it gives a moral satisfaction to those who are striving for it.

Aristotle had made distinction between what he called "distributive and retributive justice". Distributive justice gives good to everybody according to his just claim ; and his just claim is determined by his social status, which is partly dependent on the status he has received by historical destiny in universe and society, and partly by his own merits in actualizing his status and its potentialities.

Retributive justice takes place if he diminishes his status and its just claims by not fulfilling its potentialities or by acting against the social or cosmic order in which his status is rooted.

Retributive justice then appears as punishment and produces the problem of the meaning of punishment and its relation to justice. Is punishment a purpose in itself, determined by retributive justice or is it a negative implication of distributive justice and determined by it", asks Paul Tillich.

The problem becomes a complex one. The same problem would arise if justice is regarded as having the same meaning as equality. The term justice implies an element of equality, but how should be the form of equality in the world, which is composed of unequal realities ?

The world has not been composed of merely people. Where there is a people, there is a king or government. Some of the people are weak and some others are strong. Some of them are rich and some others are poor. The same is true, that among governments, some of them are wise and righteous while some others are not wise and arbitrary.

How could it be possible to conceive a world with its inequalities related to the equalitarian elements in it ?

"The question becomes even more difficult", says Paul Tillich, if we consider the fact, that the status of being in universe and society is subject to continuous changes. [5].

The law of change is permanent and regular so much so, that change is in fact the law of nature and at the same time the law of society.

It is not the intention of this paper to extensively discuss this matter, but this very brief expose is to be hoped as an introduction to our following discussion about law, power and justice in the light of al Quran.

The law of nature and the law of society are in fact one unit or one totality or at least dependent one to the other because of the fact, that there is no lawgiver but one, *i.e.* Allah, God the almighty. Such kind of law is called Sunnatullah in al Quran.

"God is He Who raised
The heavens without any pillars
That ye can see ; is firmly
Established on the throne
(of Authority) ;

He has subjected the sun
And the moon (to his law) !
Each one runs (its course)
For a term appointed.
He doth regulate all affairs,
Explaining the Signs in detail,
That ye may believe with certainty
In the meeting with your Lord.

"And it is He Who spread out
The earth, and set thereon
Mountains standing firm,
And (flowing) rivers : and fruit
Of every kind He made
In pairs, two and two ;
He draweth the Night as a veil
O'er the Day. Behold, verily
In these things there are Signs
For those who consider ! [6].

"Say : Is it that ye
Deny Him Who created
The earth in two Days ?
And do ye Join equals
With Him ? He is
The Lord of (all)
The Worlds.

"He set on the (earth),
Mountains standing firm,
High above it,
And bestowed blessings on
The earth, and measured therein
All things to gives them
Nourishment in due proportion
In four Days, in accordance
With (the needs of)
Those who seek (sustenance).

"Moreover He comprehended
In His design the sky,
And it had been (as) smoke :
He said to it
And to the earth :
"Come ye together."
Willingly or unwillingly."
They said : "We do come
(Together), in willing obedience." 7

These verses quoted from al Quran show clearly that the law of nature contained in it is a law of nature in its physical meaning, while the following verses indicate the law (power) of God, which governs the human society.

"Truly, if the Hypocrites,
And those in whose hearts
Is a disease, and those who
Stir up sedition in the City,
Desist not, We shall certainly
Stir thee up against them :
Then will they not be
Able to stay in it
As thy neighbours
For any length of time :

"They shall have a curse
On them : wherever they
Are found, they shall be
Seized and slain
(Without mercy).

"(Such was) the practice
(Approved) of God among those
Who lived aforetime :
No change wilt thou find
In the practice (approved)
Of God. 8

See also the verses quoted as follows :

"And their purpose was
To tempt thee away
From that which We
Had revealed unto thee,
To substitute in Our name
Something quite different ;
(In that case), behold !
They would certainly have
Made thee (their) friend !

"And had We not
Given thee strength,
Thou wouldst nearly
Have inclined to them
A little.

"In That case We should
Have made thee taste
An equal portion (of punishment)
In this life, and an equal portion
In death : and moreover
Thou wouldst have fond
None to help thee against Us !

"Their purpose was to scare
Thee off the land,
In order to expel thee ;
But in that case they
Would not have stayed
(Therein) after thee,
Except for a little while.

"(This was Our) way
With the apostles We sent
Before thee : thou wilt find
No change in Our ways. 9

From those verses mentioned above, we learn, that there are three kinds of law, *i.e.* :

1. Law, which governs the whole universe and is entirely falls within the power of Allah.
2. Law, which is made by man and governs the human society.
3. Law, which is not made by man, but influences the human society and even governs it, with or without the consent of man, which is called Sunnatullah. This is presemably what St. Thomas Aquinas (1226—1274) called lex divina.

Different from man made law, which is subject to the will and power of the elements of the society itself, Sunnatullah is fully independent. It does not depend to anything but the will of God himself.

Sunnatullah is permanent and regular according to its own rulings, with or without consideration to the will of man.

It is but natural, that there is no other alternative, that man has only to accept Sunnatullah unconditionally as it is.

To meet this kind of condition, which man has to face, man is endowed with sufficient equipments, one of which is of the highest value, *i.e.* reason. And it is only this reason, which distinguishes man from the other creatures of God. And it is also with this reason, that man is capable to regulate the relationship with their fellow man, with the nature around them and even with God, who creates them.

Man is free to keep things in order according to his will, but this freedom cannot transgress the limitations of Sunnatullah.

A wise man does therefore not use his reason freely without limits, but contrarily he uses it in accordance with his deepest insight on Sunnatullah.

Man made law could therefore be regarded as man's reflections on his understandings about Sunnatullah.

And because of this, human law could not be freed from growth and development, in the form of transgressions, changes and modifications, which show the reach of its higher quality. The higher the conscience, changes and modifications could take place through a good and responsible manner. Everything grows and develops along the line of Sunnatullah or at least not contradictory to it.

Human law can be conceived from customs, traditions and common usances of social groups, some of which are confirmed and officially accepted as state law.

And state law could not be discussed outside power. It does not mean, that customary law has nothing to do with power.

Every law is bound to be backed up by power and power implies force. It is power, which uphold the law. Law without power and force is no law.

State law has to be put into operation, with or without consent of the sentenced. In case the sentenced accepts the punishment voluntarily, power is felt as being unnecessary, but if he or she does not accepts it, power to enforce the law is a condition sine qua non.

To enforce the law, power of the state is necessary. But what makes a state legitimate so that it is empowered with such an enormous authority ?

The answer of this question will obviously be more than one. According to Plato, it is wisdom and virtue, which legitimize power, while Aristotle was questioning as to whether or not wealth could not be the element of legitimation.

And there are some other views climing, that it is not man, but law, which should be the source of legitimation of power.

Law is essentially impersonal and as such, it could be expected to be objective. But according to Aristotle, even law could not be the absolute guarantor with the view that law, being very closely related to the Constitution, it may lead to a consequence, that a bad state will have a bad law too.

In fact, legislation itself is just a relative guarantee for a virtue. It is regarded as being better than force or human power, but it can be bad too. A good state must be governed by law, but it does not mean that a state which is governed by law is always good. [10].

According to al-Quran, power is a grant from God. Power is endowed by God to those who God pleases.

Could it be interpreted, that being a grant from God, power might be exercised on behalf of God as it is used to be understood in the term theocracy ?

No, it could not be found any indication in al-Quran for a concept of a theocracy.

The word Khalifah, which is to be found in several verses of al-Quran, merely shows the existence of authorities on earth in general terms.

The term Khalifah, which is also used by the four Khalifs after Prophet Muhammad, should not be interpreted as Khalifatullah (Successor of God). Instead it has to be understood as Khalifatu Rasulillah. (Successor of the Messenger of God). The term Khalifatullah could not in general be accepted to be used as name or title for a Head of State on account of a presumption, that it may lead to an arbitrariness in the name of God.

It is indeed God who grants power to those, whom He pleases, but it will on no account be an arbitrary grant. Instead it is a test for the receiver.

God grants power to those, whom He pleases in the idea that those, who has superiorities. These superiorities might be in the positive sense such as in wisdom and virtue, in wealth, in physical strength or in majority of votes through a general election.

It might also be superiorities in the negative sense as in tricks, falseness and slyness[11].

It is used to be questioned by the people about the superiorities of those, who just come to power.

And history shows, that those, who come to power with positive superiorities at the beginning may gradually have degraded to the negative direction. On the contrary, those who have negative superiorities at the beginning proved in the process to be getting better to the positive direction.

God ordains :
" Their Prophet said to them :
" God hath appointed
Talut as king over you "
They said : "How can he
Exercise authority over us
When we are better fitted

Than he to exercise authority,
And he is not even gifted,
With wealth in abundance ?"
He said : " God hath
Chosen him above you,
And hath gifted him
Abundantly with knowledge
And bodily prowess : God
Granteth His authority to whom
He pleaseth. God careth
For all, and He knoweth
All things." 12.

Again :

" It is He Who hath made
You (His) agents, inheritors
Of the earth : He hath raised
You in ranks, some above
Others : that He may try you
In the gifts He hath given you :
For thy Lord is quick
In punishment : yet He
Is indeed Oft-forgiving,
Most Merciful13.

From the verses quoted above, it is clear enough, that power, which is granted y God's grace, does not automatically mean, that the receiver could exercise ower correctly.

Power should be regarded as a test from God for the receiver as to whether or ot he could exercise it in accordance with His guidance.

And in these exercises of power human reason plays a very important role. And shown him the two highways " 14. And in the other verse, God says :

" And its enlightenment
As to its wrong
and its right ". 15.

It is this human reason, which makes a ruler good or bad and it is also this uman reason, which enables to change the attitude of the governed, the way or he other depending upon how good or how bad the ruler behaves *vis a vis* the eople.

It is logical therefore, that power, be it for the government or for the governed, ould always be regarded as to how far they do conceive the Sunnatullah.

According to Ibn Khaldun " Evil is the quality that is closest to man, when I fails to improve his customs and (when) religion is not used as the model to improv him. The great mass of mankind is in that condition, with the exception of tho to whom God given success. Evil qualities in man are injustice and mutual agre sion[16].

But could injustice be justified ?

No, because it is the task of every government to uphold justice. It is clear stipulated in al-Quran, that Prophet Muhammad has been sent down to jud justly among men.

God ordains :
" Now then, for that (reason),
Call (them to the Faith),
And stand steadfast
As thou art commanded,
Nor follow thou their vain
Desires; but say : " I believe
In the Book which
God has sent down:
And I am commanded
To judge justly between you.
God is our Lord
And your Lord : For us
(Is the responsibility)
Our deeds and for you
For your deeds. There is
No contention between us
And you. God will
Bring us together,
And to Him is
(Our) final goal [17].

It must be emphasized, that people's interests with their government are not be found in those, who are in power, be it in his handsomeness or in his extrac dinary skill or in any other personal qualities.

People's interest lies in the mutual relationship with those in power. If t authorities could perform their functions rightly and justly towards the peopl they will love and will be loyal to them. Such a loyalty stems deeply from t bottom of their hearts. Contrarily, if the authorities are regarded as not bei good and just towards the people, than they lost the reason to love them.

Their loyalty might remain although it is a loyalty without love. Such loyalty is due to fear.

Justice, as has been mentioned before, is a conditio sine qua non for a human society. But how could it be possible to uphold justice, if injustice arrogantly embodies in man himself, as has been described by Ibn Khaldun ?

The wellknown poet al Mutanabbi, in his pessimistic concept of man, says as follows :

> "Injustice is a human characteristic. If you find a moral man, there are some reason why he is not unjust [18].

One of the main factors why man is inclined to do injustice is his too materialistic drives to own wealth as much as possible.

> "And violent is he
> in his love of wealth".[19].

And talking about wealth, it is just normal as to say that man in power always likes to seize everything, even his own brother's property, not to mention another's belongings. It even occurs not seldom that family relationship could be disrupted due to this very reason.

God ordains :

> "Then, is it to be expected of you, if ye were put in authority, that ye will do mischief in the land and break your ties of kith and kin" ? [20].

So is the general characteristics of man.

In this connection, Ibn Khaldun says :

> "He who casts his eye upon the property of his brother will lay his hand upon it to take it, unless there is a restraining influence to hold him back." [21].

The restraining influence is in fact the sense of being just within the man himself. The concept of man in al-Quran is "that God has created man in the best of moulds". It is due to the fact, that man, after being ruled by his passion " We (God) abase him (to be) the lowest of the low". [22].

It is therefore a must, that justice has to be invested and be developed within the inner conscience of man himself. And justice, being one of the attribute's of God, it is this kind of justice, which should be invested and be developed in the human society. Justice, which merely stems from man, would only mean something, which benefits himself. If he was a man of authority, justice means something, which makes him more and more mighty and at the same time more and more richer.

And if he was the governed, justice means everything, which enables him to lessen his obligations.

It is clearly mentioned in al-Quran, that those who fights for justice is very highly appreciated.

"God sets forth (another) Parable
Of two men : one of them
Dumb, with no power
Of any sort ; a wearisome burden
Is he to his master ;
Whichever way he directs him,
He brings on good :
Is such a man equal
With one who commands
Justice, and is on
A Straight Way ? [23].

It is therefore understandable that human history is full with incessant struggle for the fight of justice.

Demands for justice may cause the fall and rise of rulers everywhere on earth.

And in that way changes of rulers occur or to be more correct, successions among them happen.

There is nothing eternal on earth.

" Dynasties have a natural life span like individuals ", says Ibn Khaldun. [24].

The eternal nature of human being is the continuous changes and successions among rulers everywhere.

Because of this reason, changes of rulers are natural. It is even an indispensable process of history.

Yes, if there is something, which man ought to know for sure is, that he is a part of that historical process.

The wise man always tries to behave along the rule of this process. He even tries to put his societal surroundings so much so, that it will by no means be in contradictory to this historical process, which is called Sunnatullah in al Quran. But some of them try to oppose it, not for the reason that he could not realize the validity of this process, but it is due to the fact, that he proved not be able to behave along the Sunnatullah.

He has evidently been too much influenced by his passion. But could it be possible, that passion might stop historical process. No, changes and successions are parts of Sunnatullah and Sunnatullah is unchangeable ever since.

It might occur, that succession could happen sooner or later than the expectations of man, but this does not mean, that passion can shorten or prolong the duration of power.

It is even described in al Quran as a delay deliberately determined by God to give-change to more people to see the injustice as a real one. It is only God, who dispose the right time and this belongs to the Divine's wisdom.

God ordains :

"Think not that God
Doth not heed the deeds
Of those who do wrong.
He but giveth them respite
Against a Day when
The eyes will fixedly stare
In horror,[25].

In the other verse it is stated as follows :

"If God were to punish
Men for their wrong-doing,
He would not leave, on the (earth),
A single living creature :
But He gives them respite,
for a stated Term :
When their Term expires,
They would not be able
To delay (the punishment)
For a single hour, just as
They would not be able
To anticipate it (for a single hour).[26].

Based on these quotations from al-Quran, it is obviously clear that succession of rulers is a natural law or to be more correct, it is a Sunnatullah.

God ordains :

" If a wound hath touched you,
Be sure a similar wound
Hath touched the others.
Such days (of varying fortunes)
We give to man and men
By turns : that God may know
Those that believe,
And that He may take
To Himself from your ranks
Martyr-witnesses (to Truth).
And God loveth not
Those that do wrong. [27]

In accordance with these verses quoted above, it is required not merely the understanding of the absoluteness of the succession of rulers as a natural process, but also the absolute acceptance of an even submission to this Sunnatullah.

The problem is cousequently not succession itself, but how to put it in order.

It is also clearly stated in al Quran that a society, including the succession of its rulers, must be ruled by way of musyawarah (discussion and consultation).

God ordains :
" It is part of Mercy
Of God that thou dost deal
Gently with them.
Wert thou severe
Or harsh-hearted,
They would have broken away
From about thee : so pass over
(Their faults), and ask
For (God's) forgiveness
For them ; and consult
Them in affairs (of moment).
Then, when thou hast
Taken a decision,
Put thy trust in God.
For God loves those
Who put their trust (in Him).[28].

" Those who hearken
To their Lord, and establish
Regular prayer ; who (conduct)
Their affairs by mutual Consultation ;
Who spend out of what
We bestow on them
For Sustenance ; [29].

The term musyawarah means to mutually look for a consensus. However difficult it may be and even if it has to take a very long time, this way has to be followed. Otherwise, it will only be one way open, *i.e.* change without consultation, which is used to start with violence.

It is very obvious, that nobody likes violences, but history shows, that violence still takes place in several parts of the globe in time of changing their rulers.

It is only a mature nation, who can avoid violence in ruling the change of their rulers.

It is a general opinion at this time, that states have not merely to uphold the law, but also have to regulate their own social evolutional changes, including the ways and means of the ruling of the succession of their rulers, because, that a state without any ruling to provide change is the same as a state without self preservation [30].

FOOT NOTES

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2. *See* W. Friedmann : Legal Theory ; third edition, London, 1953, page 20-21.
3. *See* Helmut Coing : Natural law as a scientific problem ; article in "Law and State" Magazine, vol. 4, Tubingen, 1971, page 58.
4. *See* Paul Tillich ; Love, Power and justice, Oxford University Press, 1954, page 8.
5. *Ibid* page 9-10.
6. Q : XIII : 2, 3.
7. Q : XLI : 9, 10, 11.
8. Q : XXXIII : 60, 61, 62.
9. Q : XVII : 73, 74. 75, 76, 77.
10. *See* George H. Sabine : A history of political theory, third edition, published by George G. Harrap and Co. Ltd. Britain, 1949, page 198.
11. *See* Dr. Abdurrauf SH : al Quran dan ilmu hukum, published by Bulan Bintang, Jakarta, 1970, page 198.
12. Q : II : 247.
13. Q : VI : 165.
14. Q: XC : 10.
15. Q : XCI 8.
16. Ibn Khaldun : The Muqaddimah ; translated by Franz Rosenthal, Pantheon Books, volume I, New York 1958, page 262.
17. O : XLII : 15.
18. *See* Ibn Khaldun ; *op cit. loc. cit.*
19. Q : C : 8.
20. Q : XLVII : 22.
21. Ibn Khaldun ; *op. cit. loc. cit.*
22. Q : XCV : 44, 45.
23. Q : XVI : 76.
24. Ibn Khaldun ; *op. cit.* page 343.
25. Q : XIV : 42.
26. Q : XVI : 61.
27. Q : III : 140.
28. Q : III : 159.
29. Q : XLII : 38.
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THE ISLAMIC CODE OF ETHICS AND JURISPRUDENCE

An overall view of Islamic ethics and jurisprudence is being rendered here for the sake of a simpler grasp of the purpose of life and of following the Qur'an and Sunnah. At this point it will be pertinent to clarify that as distinct from all other religions, Islam argues always from the premise of reason and invites the intellect to reflect, enquire and explore. Hence Islam does not ask for belief without going through a process of study and reflection. The Prophet in proclaiming the unity of God does not refer to miracles and supernatural events but appeals to the people to use their intellect and wisdom. Through the message of ' tauhid ' (divine unity), he has rescued mankind from idolatory. By showing man the right path, he has taught him what he had not known before. [1] "Then whosoever will, let him believe, and whosoever will, let him disbelieve." [2] If he does not believe, the loss is his own.

In Islam, freedom of opinion and freedom of thought are a boon to man in so far as deference to these rights is due in the performance of one's duties and the invitation to truth. The best example of this is the person of the Prophet himself who, with the guidance of Allah, for the first time presented the concept of perfect ' tauhid ', which the world direly needed. Through it he brought the tribes and bedouins into the fold of one brotherhood. In the propagation of ' tauhid ', he met every conceiveable difficulty but in all his confrontations and discussions he depended on reason. When we view the advanced world of today we see that the acrimony or perverse reasoning often indulged in by the intellectuals, philosphers and in international forums these days never found its way into the Prophet's disputations with his opponents.

The Qur'an, after giving its logic, asks the people to tax their intellect and come out with informed reasoning, for instance when it says : " You have no reason to put forward in support of your point of view." [3] Or when they were told : " Bring forth your reason if you are truthful." [4] This because man not using reason is worse than beasts. " Lo ! the worst of beasts in Allah's sight are the deaf, the dumb who have no sense." [5].

By clear reason alone, faith becomes firm and one who does not go by reason his end is disaster. " That he who perished might perish by clear reason and he who lived might live by clear reasons." [6] Al-Qur'an has explicitly enjoined discussion and its constant demand is : " Call unto the way of thy Lord with wisdom and good advice and reason with them in the most convincing way." [7] Going through the Qur'an, one comes to know that time and again there was dispute with the non-believers, and the occasions were numerous, but every time, despite the persecution and provocation, not an iota of ill-will or malice spoilt the beauty of the Prophet's demeanour. In fact such ethical and legal reasons were set forth which have become an authority for all times to come. For example, in respect of ' tauhid ', it was said : " If there were therein gods beside Allah, then verily both (the heavens and the earth) had been disordered."[8]

In fact ' tauhid ' is the soul of the Islamic code of ethics and jurisprudence and human nature is of its stuff. Indeed human nature is Allah's nature. Man was created after His nature. " Allah's is the very nature after which people were created. There is no change in Allah's nature. This is the straight way but most people know not."[9] Scholars and men of research know this very well for they never find any variation in the laws of nature framed by Allah. Man can act contrary to these laws but he cannot alter them. The corporeal laws are included in the same nature and whenever man acts against them he biolates his own nature. The true understanding of nature is born out of knowledge. The better one understands nature, the better one knows Allah's nature.

For the mastery of nature through its knowledge, God has provided guidance and the Prophet, by his beautiful pattern of conduct, character and speech, has further elaborated for the people. For this purpose, he was sent. " I was sent to consummate sublime morals."[10] On following the guidance and commands given or on disobeying them is based the whole system of reward and punishment. These fundamental principles and laws are eternal and immutable. From these we construe ' haraam ' (prohibited) and ' halaal ' (permitted). There is punishment for disobedience of injunctions with regard to the prohibited and reward for compliance with injunctions respecting the permitted and injoined.

In other words, we can say that a moral vice is the practical rejection of facts as they are and pious conduct is the affirmation of the same. Intention precedes and determines voluntary action. Whether the intention is known to other people does not count. One's own conscience knows and that is the best arbiter. "Lo ! Allah knoweth what is in the breasts (of men)."[11] The Prophet has said, " actions depend on intentions."[12] Hence the basis of goodness is a good intention. In determining the value of an act, it has to be decided whether it was guided by the moral law. If not, it will be deviod of moral value. In other words, it will lack taqwa " (piety) and when " taqwa " is not there, justice will be missing too, because " taqwa " includes justice. " Be just; that is next to piety and fear God. For God is well acquainted with all that ye do."[13]

Generally man's responsibilities can be classified as material, political, ethical and legal. Although the Shariat embraces the whole gamut of this life and the Hereafter, the classification is not without point. All the mundane obligations can be termed as material. In the political field, collective responsibility is of basic importance. In moral responsibility, intention is the corner-stone. An involuntary act, good or bad, is of no moral value. In the Shariat, all the do's and dont's amount to duties.

Moral Yardstick : According to Islam, the moral criterion is the intention or will behind the act. Intention is a part of one's faith. Thus it follows that as the faith evolves, the moral stature also grows. Faith has three stages :—

(1) " Ain-ul-Yaqin "
(2) " Ilmul-Yaqin "
(3) " Haqqul-Yaqin ".

The state of one's consciousness will depend on these stages and furnish the evidence of being human. This human consciousness is a part of the universal consciousness and hence constantly yearns and strives for the " summum bonum ".

Because man cannot comprehend and synthesise within himself all the knowledge of the requirements of nature and society and cope with the challenge, Al-Qur'an has shown him the right path and given him the concept of unity of the universe. " And He it is who hath produced you from a single being......"[14] and likened all human beings to one organism. The Prophet said : " All people of faith are like a single human body, being bound to one another in ties of affection, love and kindness. When any one part of the body aches, the whole body suffers from fever or lack of sleep."[15]

When a person acts he has to decide what he will or will not do. Every human being cannot have knowledge of the whole world of history. Even if he has the historical perspective, he is not prescient. Moreover, he can have no knowledge of what is hidden in the breasts of his fellow beings. He can at the most try to infer their state of mind but this is liable to change with age and the passage of time. Thus the fascinations of youth lose their hold in middle age even as the demands of middle age die out in old age. The same is true of the passion for knowledge and action. As it waxes and wanes, the preoccupations and interests of life change. Hence man likes to follow a model of perfect wisdom and a perfect being having the essence of all divine attributes and having the knowledge of all persons, their past, present and future, and of all times. Such a being is God alone, who knowing the variety in human nature has laid down wise perimeters for human behaviour. Without this divine guidance, man would be lost. Hence he places himself under the will and wisdom of Allah and in obedience to His word follows the ways of the Prophet which are a beacon to all. In following a model, there is no risk of a deficiency or excess. In fact, by following the perfect model of good behaviour he attains to his full stature and bloom without sacrificing legitimate and natural desires or needs.

Hence Al-Qur'an has conveyed its wisdom and guidance through parables of people who were rewarded or who went astray. It was said, " Surely we created man of the best stature."[16] He can attain immortality through good deeds and righteous conduct. " Whosoever doth right, whether male or female, and is a believer him verily we shall quicken with good life, and we shall pay them a recompense in proportion to the best of what they used to do."[17] For the errant, there is torment and oblivion. " Then see the nature of the consequence of their plotting, for lo! We destroyed them and their people, everyone. See, yonder are their dwellings empty and in ruins because they did wrong. Lo ! herein is indeed a portent for a people who have knowledge."[18]

Man's actions emanate from and are subservient to his intentions. Therefore, it is necessary that he is actuated by chaste and sincere motives. His interior should harmonise with his exterior and his actions should be in accord with his

purpose and ideal. Any action which conforms to God's will and grace will eternalise his life and gain him entry into the world of everlasting peace and pleasure. " But ah ! thou soul at peace ! unto thy Lord, content in His good pleasure ! Enter thou among My bondmen ! Enter thou My garden !"[19]

Man's whole life when geared to eternal reality becomes saturated with a sense of divine unity (' tauhid '). There is no differentiation of life into temporal, spiritual, secular and religious compartments. The corporeal life is not devoid of spiritual content and the spiritual life is not divorced from corporeal reality. Hence conflict is eliminated from man's inner self-his politics, economic life and prayer. all are cast in the same mould. In other words, his living and dying are for Allah. " Say : Lo ! My worship and my sacrifice and my living and my dying are for Allah, Lord of the Worlds ."[20]

Self-fulfilment.— The aim of life is attainment of Allah and this stage is reached by the consummation of self. Hence it is necessary to know the destination of the self. What is consummation of the self ? It is the perfection of human nature. Human nature being common to all human beings, the full development of the individual self is related to the society. Hence individual perfection is not possible unless the society as a body has attained perfection. If a person seeks perfection through negation of the society or retirement from the world, it is not possible.[21] Instead of making progress, he will decline and be cut off from all sources of self-perfection.[22] His soul will suffocate within his body. Therefore, it is necessary that every individual works for the benefit of all mankind and that he keeps the example of all the prophets in front of him day and night. Since the Prophet's pure life contains a reflection of the best in the lives of all the prophets-a model perfected by him by his labour of day and night—it is a source of guidance to all for the attainment of Allah and self-realisation. As every human being is a semblance of the Supreme Being and takes from His nature, the purpose of his life is to find Ultimate Reality. In so far as the nature of all human beings is alike, although individually they are separate, it is necessary to cultivate values which are the common denominator in mankind.

Since man's material existence is for a limited period of time, during which a hundred and one conflicting and obstructing forces are also at play, it is out of question for him to attain the "summum bonum" in this life. However the more a person will pursue the "summum bonum" the higher will be his rank amongst his fellow-beings.

In charting the path to its goals, Islam has given the guidelines for the progress of the individual and the society. Now whosoever, whether an individual or a group of people, fails to opt for this path not only harms himself but also thwarts the progress of mankind as a whole and shall be answerable for the failure. "Remember (be warned!) that every person among you is a shephered and every shephered is easwerable for his flock." [23]

Acquisition of Knowledge is a Duty.—It is incumbent on every individual to know and study the guidelines laid down for the perfection of the self and the attainment of good and strive day and night for the achievement of this goal. Quite often what we term a good act is, in fact, not a good act or is not as bad an act as we think. Because we spend most of our lives straying and groping in the dark, while we labour under the delusion that we are on the right path, which is worse, acquisition of knowledge is the supreme duty. "Whoso is blind here, will be blind in the Hereafter, and yet further from the road." 24

There are three levels of human disbelief and straying :

1. *One is the person who neither kows nor tries to know.* The Quran explains such a case and says : "For indeed it is not the eyes that grow blind, but it is the hearts within the bosoms that grow blind." 25 Again, "Already we have urged into hell many of the jinn and humankind, having hearts where-with they understand not, and having eyes wherewith they see not, and having ears they hear not. These are as the cattle-nay, but they are worse ! These are the neglectful." 26

2. The second is the person who also does not know but thinks that he knows. He is trapped in hallucination and chimera. "Be not as those who say, we hear, and they hear not."27

3. *The third one is that person who knows right from wrong but knowingly acts contrary to this knowledge.* "A party hath He led aright, while error hath just hold over (another) party, for lo ! they choose the devils for protecting friends instead of Allah and deem that they are rightly guided." 28

To this day, in the entire history of mankind, philosophers and public leaders while laying down the limits of ethical conduct and law have not been able to set a course by following which, according to one's lights and strength, one could reach the highest good but Islam has delineated a straight course which is open for him to traverse upto its farthest reaches.

Whosoever has recited the Kalima with a sincere heart, that is to say, fully understood it, has become a Muslim. Now, is there such an unfortunate human-being in the world who sincerely believes and yet does not act according to his belief. He is certain that to embrace Islam means to enter a heaven of security and peace, and chose a path in which there is peace for the society too, where his hand cannot harm others : "A muslim is one from whose tongue and hand another muslim is safe."29 (Sahih Bukhari, Book of Faith). Also none other could harm him: "No muslim will shed the blood of another muslim, nor cause an injury to his honour, nor deprive him of his goods."30 (Sunan Ibne Maja, Book Kitabul Fitan): He has pledged to follow and obey a Being Who has knowledge of every thing, Who is Almighty, Who is full of beauty and excellence, Who is Omnipresent, Who is Omniscient, All-powerful the Perfect Good, the Source of all

light, the Fountain-head of ecastacy and bliss, in one word, a Perfect Being. Therefore, the direction of the believer's nature is determined by this knowledge and he tries to live upto the Divine Nature, which is in fact his own nature.

The attainment of the attributes of the Omni-present, the Merciful and Beneficient is the fulfilment of his own nature which, in the pursuit and quest of Allah, endows him with the unique distinction of being human. The light of these attributes leads him to a system of values and a programme of action. To explain and exemplify the coherence, organisation and discipline of these values, the Prophet by his living example has presented man with a whole code of life. God has instructed us to adopt his ways. "Verily, in the messenger of Allah, Ye have a good example for him who looketh unto Allah and the Last Day and remembereth Allah much."[31] To follow his example is really to obey Allah. "Whosoever obeys me obeys Allah."[32] (Sahih Bukhari, Book of Al-Jihad Chapter : One Who Fights For His Leader) Hence he who loves the Prophet is loved by Allah. "Love me ; Allah will love you."[33] (Sunan-i-Tirmizi, Chapter : Praises).

The Individual and the Group.—It has been stated above that Islam has treated the whole society as one unit. However, according to the Islamic code of life, an individual living in the society remains an individual and the society, despite being a collection of individuals, remains a single unit. Neither does the individual by merging with the society forfeit his identity nor can the society afford to ignore him. Both are interdependent and yet independent. The problem of the rights of the individual and the society is a dilemma which neither other religions nor the scholars of modern times could resolve. This dilemma lies at the root of the ideological conflicts of today but was resolved by Islam fourteen hundred years ago.

In modern times, some thinkers have given first place to the collective good. The result is that taking social consciousness as something independent and supreme, the individual has been totally merged in it. This is the case with Communism "under which there will be one property of the whole people"[34] no class is recognised and nothing can belong to an idividual or a group of individuals. All property is collective. All creatures are one person. The zenith of collectivism is that there is no State and the distinction between individuals totally disappears. However, Islam has held the individual as responsible for his own life. Hence both punishment and reward are for the individual. Islam favours individualism and holds the individuals as answerable for their actions.[35]

In Islam punishment to the individual is not merely a device to create fear in others nor is its sole purpose to stop others from committing crimes. This is a fallacy which holds sway among the jurists of today. Both reform and punishment are the object. In pre-Islamic Arabia also, the law in force was based on the premise that killing prevents killing.[36] Even today the advanced States in the West try to tackle Insanity and barbarism with the law of the jungle.[37] They set fire to whole cities, villages and plantations. If the use of the Atom Bomb and the Napalm Bomb is not madness, what else is? But in Islam the blood

of the victim is to be avenged from the person who killed him and killing anyone except for this reason is prohibited. This priciple is in itself life-giving. "And there is life for you in retaliation, O men of understanding that ye may ward off (evil)."[38]

The Qur'an allows war against the enemy only to the extent that the mischief is put to an end and the enemy cries a halt to the fighting. Once the enemy has sued for peace, war cannot continue. The fighting will be only against the aggressors. The weak, the sick, women, children and civilians will not be subjected to maltreatment. "Fight in the way of Allah against those who fight against you but begin not hostilities. Lo ! Allah loveth not aggressors."[39] In the next ayat, there is further admonition to cultivate the quality of mercy which is Allah's own attribute : "But if they desist, then lo! Allah is Forgiving, Merciful."[40]

In Islam, the emphasis is on the reform of the errant individual. If he is guilty of an offence which affects himself he should repent and he will be forgiven. "Tell those who disbelieve that if they cease (from persecution of believers) that which is past will be forgiven them".[41] But if anyone has committed an offence which affects the rights of another individual then, after the repentance and reform of the former, the latter can forgive him as forgiving is always the better course."..Those who control their wrath and are forgiving toward mankind; Allah loveth the good."[42] However, the crimes which affect the society as a whole cannot be forgiven because they violate the rights of Allah.

Islam has also distinguished between an offence committed to fulfil an inescapable need of life and the one committed owing to defects in one's character and out of bad habits. Perhaps other modern laws have not kept this distinction in view. If somebody, for want of the necessities of life, steals to satisfy his needs he cannot be convicted for the offence but if a person of substance steals then he guilty of a crime.

The economics of the modern age have become extremely complicated without having established an equilibrium between rights and duties. Islam has resolved these conflicts very simply and deftly. It has abolished interest. In its place in present times, all countries have imposed controls on earnings in one form or another. In some countries the individual is not permitted to have personal property and in many taxation is increased in relation to the increment in one's income although this law does not directly benefit the masses in any way. Contrary to this, Islam does not set any limits to one's legitimate income but restricts expenditure. Extravagance is reprehensible. "Lo! the squanderers were ever brothers of the devils, and the devil was ever an ingrate to his lord."[43] Elsewhere the Qur'an says : "..... They ask thee how much they are to spend. Say, what is beyond your needs." [44] We should use the surplus in good or profitable works.

In the matter of rights and obligations there is an important distinction between Islam and the religions, creeds and laws of other people. A person stranded on a lonely island would have the liberty to act according to his whims but

Islam forbids waste of time and lays onus for the due performance of his duties even on such a person. Prayer has been ordained as a constant reminder to man of his duties. As far as his rights are concerned, nature has provided plentifully to satisfy his needs, a constant refrain in the Holy Qur'an. Whatever is in the heavens and the earth is for man's usufruct, that is to say for his enjoyment and benefit but not wastage or destruction.

Suicide.—In modern times in many countries or societies, suicide is not frowned upon. In fact, in some, suicide is even sanctioned by religion, for example in Japan and India. The contagion is now spreading to the West also and we should not be too astonished if sooner or later the international law begins to recognise this barbaric act as legal and normal. However Islam would have none of it and places an absolute ban on both suicide and murder, both of which are treated as the biggest sins. "O ye who believe! Ye have charge of your own souls." 45 Many people commit suicide on account of feelings of insecurity and fear or out of superstitious belief. Occasionally they inflict death on each other by mutual consent. The law of the Jews permits suicide. The Prophet Moses suggested suicide to his people for atonement for their sins"....So turn in penitence to your Creator, and kill (the guilty) yourselves." 46 In Europe, Hitler and his associates committed suicide which was acclaimed by some people as a heroic act. Contrary to such views, the Qur'an enjoins patience in trial and tribulation as an act of great courage."....And persevere whatever may befall thee. Lo! that is of the steadfast heart of things." 47 Under any fear, suicide or mutual killing by consent is not permitted.

Human Rights.—In our time, the United Nations Organisation has included in its charter of human rights those rights which Islam had acknowledged without distinction between the sexes fourteen hundred years ago, for instance, the right to freedom of thought and expression, the right to property, the right to contract, the right to education, the right to freedom from exploitation, dignity of labour, the universal brotherhood of man without regard to colour, race or wealth, the ordering of society on the principles of equity and fair play, religious tolerance, emancipation of women and their spiritual equality with men.

Rights of Women.—Even today woman in the West does not enjoy the balance of equality which was ceded to her by Islam fourteen centuries ago. Men and women are to be treated at par with each other in all the theatres of action. Both will get a just recompense for their deeds."......Lo! I suffer not the work of any worker, male or female, to be lost." 48 Both have the right to earn and to disposal of their incomes as they wish. "Unto men a fortune from that which they have earned, and unto women a fortune from what they have earned." 49 Both have the right to enjoin good works and forbid wrong-doing; one can act as attorney for the other. "And the believers, men and women, are protecting friends one of another; they enjoin the right and forbid the wrong." 50 In the same manner, they are equal to each other in all matters of State, politics, application of laws and implementation of decisions. It has also been stated in the

Qur'an that women could offer 'bayt' (allegiance) to the Prophet as much as men could. "O Prophet, if believing women come unto thee, taking oath of allegiance unto thee that they will ascribe nothing as partner unto Allah, and will neither steal nor commit adultery nor kill their children nor produce any lie that they have devised between their hands and feet nor disobey thee in what is right then accept their allegiance and ask Allah to forgive them. Lo ! Allah is forgiving, Merciful."[51] The excellent reasoning powers of women have found mention in the Qur'an. Khawla binte Thalabah engaged in argumentation with the Prophet and her line of reasoning was finally accepted. " Allah hath heard the saying of her that disputeth with thee (Muhammad) concerning her husband, and complaineth unto Allah. And Allah heareth your colloquy. Lo ! Allah is Hearer, Knower."[52]

The Individuality of Women.—One of the rights of women which has been brutally trampled upon in Europe and upheld by Islam at all costs is that her identity cannot be submerged in that of man. Her individuality is maintained at all costs. In the West a woman cannot have her separate identity. Before wedlock she will be known by her father's name and after wedlock by her husband's. After divorce and fresh marriage she will be known by the other husband's name, In short as an independent personality her survival is out of question. If either spouse reciprocated by adopting a part of the other's name, a sense of equality would arise. Amongst Muslims where the name of the spouse has been attached, it has not been necessarily man's as in the case of Khawla binte Thalabah; otherwise invariably women have used their own name and not super-imposed any man's name on their appellation.

The Importance of Duties.—Alongwith rights, when we consider duties we find that questions which perplex human society even today were answered by Islam a long time ago, for example, those which concern respect for life, freedom, nobility of character, private property, social responsibility, truth and religion but the " literati " and intellectual luminaries of today are still uncertain about these concepts and change over from one definition to another now and then. Truth and justice are basic duties both morally and legally speaking. Without these the society ceases to progress. Neither equality can be established nor character formed. The sense of discipline and moral fibre of the society will be the product of the performance or otherwise of these duties. Hence, in the Qur'an , maximum stress has been laid on these two duties. However, what to speak of the less educated and average class of societies, even the intellectual elite of Europe treat these two duties as secondary and subordinate to expediency and circumstance. Hence gradually the executive has been perverted and reduced to an instrument of cunning, craftiness and cruelty. The West has held the performance or observance of these duties in certain circumstances as the cause of harm and mischief in the society. Injustice has come to be accepted as the norm for the sake of administrative expediency and exigency. The statesmen and experts of Europe, America and Russia always, in fact, deny their secret hand in engineering revolt and fomenting turmoil against established governments and their destabilisation and overthrow

but several years later openly admit their role in arranging these upheavals without so much as a qualm of conscience. However, in Islam whether in the battle-field or the councils of peace there is no room for lying and foul play. Truth and justice have pride of place over all other duties. These two are regarded as perfect duties.

The Importance of Virtues.—Virtues are as good as duties according to Islam. Although ' taqwa ' (piety) is a virtue, it is also counted amongst duties. Another example is that of self-sacrifice, which is also out of a sense of duty. Those people who marvel at the spirit behind the finest feats of self-sacrifice and regard these acts as superior to duty are unacquainted with the vast and deep meaning of the term ' duty '. On the field of battle when water was proffered to a wounded Muslim soldier he said that it should be taken to another in greater pain. The latter motioned towards a third one suggesting that it should be offered to him first. By the time they reached him he had expired. When they returned to the second he too had breathed his last and the first one was already cold. Actually in this example of self-sacrifice the prime mover is a sense of justice which dictates that what one loves most is given to one who needs it most. " You will not attain to piety until you spend of that which ye love. And whatsoever ye spend, Allah is aware thereof ."

Reverence for knowledge is the supreme duty in Islam. Knowledge is the hall-mark which distinguishes humankind from beasts. Al-Qur'an " teacheth man that which he knew not." And this is the greatest truth. Beasts do not have the ability to acquire knowledge. With its help, man can see right from wrong and good from evil. To differentiate between these and be knowledgeable about them is the highest virtue. All other virtues spring from knowledge, which is light, glory. Without it there is utter darkness. " Whose blind here, will be blind in the Hereafter, and yet further from the road."

Without the knowledge contained in Al-Qur'an, man is no longer in the class of human beings. Moreover if, having the knowledge, he does not live and act according to it he is doubly at fault. A person who has committed a murder is subject to ' qisas'.* If he has discharged this liability he will not be called to account for his crime in the Hereafter. However, if the murder is committed with the knowledge that the victim is virtuous and a ' momin ' (believer) then the killer will have to suffer retribution in the Hereafter. " Whose slayeth a believer of set purpose, his reward is Hell forever. Allah is worth against him and He hath cursed him and prepared for him an awful doom."[56] Those Muslims to whom this truth is revealed cannot commit a deliberate murder.

Definition of Virtue.—Virtues and noble morals are those qualities which lead a human being to God. " And that thy Lord, He is the goal."[57] However the condition is that nobility should be spontaneous like the effulgence of light from the sun and not fitful or alternating between better and worse from person to person. True nobility means that it has become one's second nature. For this, one has to undertake great toil. Virtues are acquired and formed from knowledge. The discipline of virtues is not inborn or natural.

In Al-Qur'an, the code of ethics has been revealed according to a unique and natural sequence. The order and contents of the first verses of the Qur'an to descend and the next revelation of seven verses after three years are altogether natural. In the light of their guidance, the building up of noble character comes most naturally. It has been stated in Al-Qur'an that before its study to glean knowledge one should be inclined to piety and be sincere in the desire to pursue the guidance in this book " ...... this is the book ; in it is guidance sure, without doubt, to those who fear God."[58] And " making religion pure for him."[59]

Hence the process of reform of the ' ummat' which the Qur'an an has spelt out for the Prophet Muhammad clearly sets out the sequence and stages of the guidance. " Allah verily hath shown grace to the believers by sending unto them a messenger of their own who reciteth unto them His revelations, and causeth them to grow, and teacheth them the scripture and wisdom."[60]

First of all, one should hear or read the revelations and then assimilate the teachings contained therein with reverence and sincerity in the heart. The latter is ' tazkia ' (purification). Then comes the turn of teaching these values and principles because without first understanding them their practice is not possible. The last stage in the process is reached with the attainment of divine wisdom (hikmat), which is the insight into the essence of these values and the ability to their judicious synthesis into an exquisite formula.

Hikmat (divine wisdom) presupposes command of both theory and practice. This is illustrated with the case of Hazrat Dawood (David) who used to make armour and was an adept in the manufacture of arms, and a science expert of his time. Both he and Hazrat Sulaiman (Solomon) were masters of practical wisdom. " To each of them we gave judgement and knowledge."[61] The Qur'an makes mention of Luqman's philosophical and wise sayings. "And verily we gave Luqman wisdom."[62] Thus the Qur'an by repeatedly inviting attention to thinking, observation and deep reflection has provided the key to ' Hikmat '. This wisdom is the pinnacle of justice and virtue which is reached after a great deal of reflection on the knowledge acquired. Thus prophets are the wisest of men. If Plato arrived at the finding that the wisest and most learned of men was the one most virtuous and noble amongst them,[63] he was not wrong. Because a person who has acquired knowledge of all things " And He taught Adam all the names "—cannot knowingly act contrary to it. Having knowledge that a fire will burn, the bite of the snake will kill and the lion will tear to pieces, a person will not by way of experiment leap into the fire willingly, nor offer himself for a snake-bite nor thrust his head into the jaws of a lion. Anyone acting contrary to his knowledge and good sense is either out of his senses or insincere—a fool or a villain—and is at logger-heads with nature. Cruel people and tyrannical monarchs are from this class.

Since the true state of excellence of character and just conduct can be attained through wisdom alone, which is a stage beyond that of learning and knowledge, it is not possible that any of the attributes so achieved can fluctuate

their degree by a lessening or increase. The Greek scholars and their follower when talking of a virtue mention its opposite quality or of its being in lesser or greater degree, just as the surfeit of courage is valour and its deficiency is cowardice. The Qur'an in its exposition of noble conduct has treated futile quibblings and sophistry as totally unworthy of any attention. Even for the sake of argument and exchange of views, these topics are of no consequence, Qur'anic wisdom and description of virtuous conduct are clear and easily comprehensible. For instance, let us take the case of courage. Here a question of degree—less or more—does not arise. If a person is scared, the feeling is termed cowardice, but if he acts rashly against the counsels of discretion or his better sense, the act is termed as one of valour or daring although neither of these acts of cowardice or valour have the remotest bearing on courage. This is so because, as explained earlier, noble conduct or virtue has an element of persistence and resolution. With this element missing, a good work is no more a good work. If a person has his head devoured by a lion, his act cannot be accepted as noble or wise. The act does not have the slightest connection with virtue. For this reason, it has been stated earlier that for the principles of religion and code of life, sincerity is a prerequisite. Hence in distress and adversity as righteous person shows patience for the sake of Allah. "And bear with patient constancy whatever betide thee: for this is firmness (of purpose) in (the conduct of) affairs."[64] A 'momin' (believer) is neither assailed by fear nor does his resolve waver in the face of temptation. ".... And whose followed My guidance, there shall no fear come upon them, neither shall they grieve"[65].

Justice.—Modern moralists regard justice as a social virtue and others interpret it as equality of rights or equal distribution of wealth or hold that it implies sharing according to the ability and qualification of each. All these trends are materialistic and immoderate. The Qur'an first invites all for the satisfaction of every person's material needs and then soon invests it with the spiritual dimension: "O ye who believe! Spend of the good things which ye have earned and of that which we bring forth from the earth for you, and seek not the bad (with intent) to spend thereof in charity when you would not take it for yourselves save with disdain."

The Qur'an also says: "Ye will not attain unto piety until you spend of that which ye love."[67] Moreover, everyone has been held accountable for satisfaction of the needs of others. "If a single person in any neighbourhood is allowed to spend his night suffering the pangs of hunger then Allah is absolved of the responsibility of protecting its inhabitants."[68] When Allah withdraws His protection then no one can protect. In the upshot, injustice breeds sedition, the crime rate increases and the signs and symptoms of devastation begin to loom large.

Distribution of Wealth.—The prime cause of trouble, dissension and injustice in the world is the maldistribution of wealth and the desire for accumulating it beyond one's needs. Islam has struck at the very roots of the mischief. "And

they ask thee what they ought to spend. Say: That which is superfluous. Thus Allah maketh plain to you (His) revelations that haply ye may reflect upon the world and the Hereafter." 69

Islam always lays accent on the desirability of man being realistic and being a servant of God. Hence he can neither earn through unfair means nor help him self except to legitimate income. Al-Qur'an has clearly said:

"Allah would make the burden light for you, for man was created weak. O ye who believe! squander not your wealth among yourselves in vanity except it be a trade by mutual consent." 70

Man cannot lay a claim to the ownership of anything at all in the world. All was created by Allah and he is its real Lord. Islam demands, once this reality is understood, that all claims to ownership should be renounced and Allah's lordship accepted. Whatever man has got, he is its trustee. He should, therefore, devote it to public weal and not hoard it. Only so much of it should be consumed as has been commanded.

" Say: Unto whom belongeth whatsoever is in the heavens and the earth? Say: Unto Allah."71

When all these possessions and wealth are a transitory phenomenon and man's status is no more than that of a vicegeren or deputy then pledging one's allegiance to Allah and his Prophet implies that these resources would be utilized according to Allah's command.

" Believe in Allah and His messenger and spend of that whereof He hath made you trustees; and such of you as believe and spend (aright), theirs will be a great reward."72

Islam's demand is that the expenditure or consumption will be according to the way shown, " that it become not a commodity between the rich among you." 73

It is also the demand of justice that no person should sit back and enjoy the earnings of another. He should not beg for a a living nor be a parasite on anyone. Islam requires everyone to work for his living. No one in an Islamic society could sit idle. " And when the prayer is ended, then disperse in the land and seek of Allah's bounty."74

The Prophet has declaimed: " The best food for a person is that which he has earned with his hands. Hazrat Dawood (David) used to eat that which he earned with his hands." 75

The Prophet has also said: " It is incumbent upon Muslims that they work and engage in toil. As a recompense for this they have a share in the tax." 76

The Prophet has invited attention to this duty again and again:

"It is your duty that you work upto your utmost strength."

Hence one will earn commensurate with one's effort, albeit he will get full recompense for his labour. There shall be no decrease in it under any circumstances.

"And for all there will be ranks from what they do, that He may pay them for their deeds ! And they will not be wronged." 77

The Prophet has also said that a task should be accomplished with sincerity and skill :

"Allah likes that whenever anyone attempts anything he should try to excel himself." 78

Justice and Court.—For the guidance of the judiciary and the courts, the Qur'an has laid down an important principle. In this way of thinking, there is perennial guidance for research and 'ijtihad'. Before the Qur'an was revealed neither such rules with so much detail were devised for the guidance of the wise men and scholars of ethics and jurisprudence nor their attention directed towards them in such an excellent manner :

"Show us the straight path,
The path of those whom thou hast
favoured : Not the path of those
who earn thine anger nor of those
who go astray." 79

For research on the 'Right Path', in every era, those who are firm in knowledge and great men should devote themselves to the study of the lives of Prophets, and truthful and pious people. And this study will be complete only when the causes of the downfall of people who went astray and earned Allah's wrath are also examined. Thus will become available a fund of precedents and testimonies which will provide the key to the solution of many problems. For this reason the Qur'an has laid so much emphasis on the study of history and the rise and fall of nations and itself narrated the experience of individuals and peoples to amplify its teachings. Until and unless the world of history is in front of our eyes, future progress is ruled out. It provides an insight into all the better and worse that has transpired. For the administration of the Society, Economy and Justice, a better source for guidance will be hard to find.

In this, way, ability in justice and skill in ethical syllogism—deductive reasoning in matters of ethics—is acquired. For instance, consider the following precept in the Holy Qur'an .

"Thy raiment purify, pollution shun."80

Is it not true that insanitary conditions in the residential areas breed varieties of bacteria which cause infectious diseases. If life is worth cherishing then for its preservation all those means must be adopted which are conducive to good health. There should be no litter or garbage in any neighbourhood and adequate for its suitable disposal must be made. The principles of hygiene

must be observed as a matter of duty and all the latest techniques and methods for the protection and maintenance of good health should be employed. To under-rate the importance of sports, exercise and walking as healthy activities or the use of harmful drugs and addiction to habits injurious to health are as good as the taking of human life. On this principle, the Qur'an has articulated as a matter of high priority :

"..........and be not cast by your own hands to ruin."[81]

And the Prophet explained, "because your body too has its claims on you."[82] Hence all those acts which are injurious to health are forbidden. If smoking causes cancer it is equally forbidden.

The Holy Qur'an has again and again dwelt on the need to reflect over and enquire into the causes of the rise and fall of nations and to draw lessons therefrom. Man is Allah's vicegerent on earth and as such it behoves him to work for the well-being of the world, to derive advantages from it and minister to the welfare of mankind. This is the trust which he has accepted. To draw profit from it and to work for its betterment with all his strength are amongst his duties. The State too carries due responsibility for adopting necessary measures for the achievement of these objectives. The forest wealth should be saved from depletion and depredation. There should be canals, gardens and proper housing. There should be town planning and careful study of the environment.[83] Many nations were wiped out because of their perversities, lack of enquiry into the laws of nature and neglect of the study of their environment. Allah has said : "How many a township have we destroyed while it was sinful, so that it lieth (to this day) in ruins, and (how many) a deserted well and lofty tower !"[84]

The ruins of Mohenjodaro, the great city of one of the world's most ancient civilisations is an object lesson for us. Most likely the river Indus changed its course, a flood struck and the city was laid low. It is a certainty that the people of that city had not made a searching study of their environment and of natural laws. The Qur'an has cited many similar cases, for example, the people of Iram, the people of Noah and the people of Ad and Thamud.

The Qur'an commands us to conquer and gain mastery over nature. To plan and found beautiful cities and live a successful life, the description of paradise in Surai-Rahman can guide us. God has created climates, rivers, mountains, forests, the treasures in the bosom of the earth and planets and stars in the skies, all for the sake of human beings. But to profit from these gifts of nature, the acquisition of knowledge and good conduct are preconditions. For this very reason, the Qur'an has informed of the consequences of going astray of past peoples.

The Process of Accountability.—With developments like the industrial revolution and the renaissance, the sources of knowledge, power and excellence revived and multiplies. The prospects of the conquest of nature brightened and the field for promotion of welfare broadened but at the same time the hazard

of misdoing and subersion also escalated. The reason for this was not the industrial revolution or the renaissance but the fact that the control of industry and science and technology was allowed to pass into the hands of unscripluous racketeers who were free to abuse the scientific advances for self-aggrandisement. An upsurge in moral excellence might have accompanied the industrial revolution and renaissance if the lead of right-minded people were accepted, the cause of truth and justice upheld, research for humanitarian ends pursued with enthusiasm, the process of dialogue not interrupted and the counsels to truth and patience made to prevail. Mankind might then have been saved from the ravages and havoc it sustained.

"By the (Token of) time (through the Ages), verily Man is in loss, except such as have Faith, and do righteous deeds, and (join together) in the murual teaching of Truth, and of Patience and Constancy."[85]

To enjoin right and forbid wrong is a duty for every Muslim. The Muslims have been constituted into an 'ummat' to perform this very duty in the world. The exhortation to truth and enjoing of patience is the unique principle of accountability. In an Islamic society every individual has to be right-minded. There is no room for 'bad characters' in this society. An individual becomes a 'bad character' if the parents, the neighbours, the residents of the locality and other fellow beings do not check or chide him for misbehaviour. The bond of affection and brotherhood among them are not strong enough.

"The Prophet said, 'Help your brother whether he be the oppressor or the oppressed.' Someone asked him, 'O Prophet, of course, we should help the oppressed but how could we help the oppressor? He said, 'Check him from oppression and this will be a help to the oppressor."[86]

The process of accountability is at work at all times in an Islamic society whether the person concerned be the ruler, a man of wealth or influence. By presenting himself at the bar of accountability, the Prophet has set an exquisite example the like of which is not come across in any religion or even in any modern state. During his last illness, the Prophet came out of his 'hujrah' (chamber) *supported by Fadhl Ibn Abbas and Ali Ibne Abi Talib, seated himself* on the 'minbar' (pulpit in a mosque) and addressed the gathering as follows :

> "O' people! if I have ever laid ony any one's back with a lash, here is my back; he should avenge himself. If I have insulted any one by calling him names, here is my honour, he may even the score. If I have snatched anybody's goods, then here are my goods and he can help himself to them. And no one should be afraid of avenging himself upon me for fear that contumely does not become me. Look, you should all realise that, for me, the best among you is one who takes from me his due if due there be unless he waives its recovery out of his sweet will, because this wil enable me to face my Creator with a clear conscience,"[87]

Vastness of Justice.—After the enormous progress made by the human society it has been realised that not only human beings but also animals are entitled to fair treatment. However Islam has not confined justice to animals alone but expended its scope to include even inanimate things. What is more, the quality of mercy has been recognised as the principal ingredient in the connotation of justice. The Prophet was sent as a mercy to the whole world. The killing of animals without justification, loading them with burdens beyond their strength or neglecting their needs has been particularly condemned. Similarly the need for fair treatment to minerals and the inert objects of the univers has been recognised.

In Islam the reason to struggle for supremacy and ever-increasing progress is that the attainment of the exalted goal set for mankind by Al-Qur'an makes imperative constant observation, research and deep thought about the entire universe leading to its conquest by man. In the forward march, from moment to moment, new challenges and fresh strategies for achievement emerge and new vistas of advancement open up to help man discharge his debts as Allah's vicegerent on earth and to enable him through his struggle in this universe to ultimately find his way to Allah, the Creator and Cherisher of all the Worlds.

The present age in setting greater store by the society than the individual has weakened the effort for the development of the human personality to its full stature. The result is that the individual finds himself up in arms against the society and its laws. While Islam, by teaching universal brotherhood through 'tauhid', has levelled down all the differences of high and low and the individual and the society, it has also held up the Prophet's beautiful pattern of conduct as a model for all human beings to emulate. Thus each individual, if he is sincere, becomes a blessing for the society in his own right.

From a study of the Prophet's pure life, it becomes clear that, on the one hand, his communion with Allah was direct and immediate he was standing alone in the Infinite Presence on the other side, as a result of his vision into the depths of existence, he was dynamic in his life and a persistent sufferer for the reform of the world.

Today man has only one side of the picture before him. He is striving to know the unknown. He desires to uncover the inner core of everything in the universe, but what he overlooks is the reality of his own being and its fragile basis. "Allah would make the burden light for you, for man was created weak."[88] As a resut of his oversight, he tends to forget his Creator and Cherisher. If we believe that Allah is Omnipresent, Omnisoient and the Supreme Protector, we should begin every action in His name and invoke His help alone. If man can bring himself to grasp this truth, then, with the grace of Allah, he would attain a stage from where he will witness himself a participant in every event in the universe.

FOOT-NOTES

1. Qur'an, 96 : 5
2. Qur'an, 18 : 30.
3. Qur'an, 10 : 69.
4. Qur'an, 2 : 111.
5. Qur'an, 8 : 22.
6. Qur'an, 8 : 42.
7. Qur'an, 16 : 125.
8. Qur'an, 21 : 22.
9. Qur'an, 30 : 30.
10. Imam Malik, Al-Moatta, Chatt. Husn Al-Akhlaq.
11. Qur'an, 5 : 7.
12. Sahih Bukhari, Chapt. First revelation.
13. Qur'an, 5 : 8.
14. Qur'an, 6 : 98.
15. Sahih Bukhari, Reported by Noman bin Bashar.
16. Qur'an, 95 : 4.
17. Qur'an, 16 : 97.
18. Qur'an, 27 : 51-52.
19. Qur'an, 89 : 27-30.
20. Qur'an, 6 : 163.
21. Musnad Ahmad Ibn Hanbal, Vol. 6, p. 226.
22. Qur'an, 4 : 145.
23. Sahih Bukhari, Kitab Al-Ahkam.
24. Qur'an, 17 : 72.
25. Qur'an, 22 : 46.
26. Qur'an, 17 : 179.
27. Qur'an, 8 : 21.
28. Qur'an, 7 : 30.
29. Sahih Bukhari, Book of Faith.
30. Sunan Ibn-Maja, Book, Kitab Al-Fitan.
31. Qur'an, 33 : 21.
32. Shahih Bukhari, Book of Al-Jihad, Chapt. one who fights for his leader.
33. Sunan-i-Tirmizi, Chapt. Praises.
34. M. Rosenthal and P. Yudin, A Dictionary of Philosophy, Moscow, Progress Publishers, 1967—P.415.
35. Sahih Bukhari Kitab Al-Ahkam.
36. Al-Qantlanfa Lib Qatl.
37. Madness for madness.
38. Qur'an, 2 : 179
39. Qur'an, 2 : 190
40. Qur'an, 3 : 192
41. Qur'an, 8 : 39
42. Qur'an, 3 : 134
43. Qur'an, 17 : 27
44. Qur'an, 2 : 209
45. Qur'an, 5 : 105
46. Qur'an, 2 : 54
47. Qur'an, 31 : 17
48. Qur'an, 3 : 195
49. Qur'an, 4 : 32
50. Qur'an, 9 : 71

51. Qur'an, 60 : 12
52. Qur'an, 58 : 1
53. Qur'an, 3 : 92
54. Qur'an, 17 : 72
55. The law of equality in case of murder. Al-Qur'an : 2 ;178
56. Qur'an, 4 : 93
57. Qur'an, 52 : 42
58. Qur'an, 2 : 9
59. Qur'an, 7 : 29
60. Qur'an, 3 : 164
61. Qur'an, 21 : 79
62. Qur'an, 31 : 12
63. Lily, william, Introduction to Ethics, London, 1957, p 305
64. Qur'an, 31 : 17
65. Qur'an, 2 : 38
66. Qur'an, 2 : 267
67. Qur'an, 392
68. Musnad Ahmad Ibn Hanbal, Vol. 1, P.33
69. Qur'an, 2 : 219
70. Qur'an, 4 : 28-29
71. Qur'an, 6 : 12
72. Qur'an, 57 : 7
73. Qur'an, 59 : 7
74. Qur'an, 62 : 10
75. Sahih Bukhari, Egypt. Dar Al-Sho'ab, 1968 Vol. 3 p. 74
76. Sahih Muslim. Egypt 1973. Vol. 4 p. 387
77. Qur'an, 26 : 19
78. Abdul Hakim, Al-Hurriyat Al-Am, Jamea Ain Shams, Cairo, 1974. p. 488
79. Qur'an, 1 : 5-7
80. Qur'an, 74 : 4-5
81. Qur'an, 2 : 195
82. Sahih Bukhari, Kitab, Al-Jehad wa Al-Siyar, Chapt. 46
83. Muqadma Ibn Khaldon, Book 1, Chapt. 4-5
84. Qur'an, 22 : 45
85. Qur'an, 103 : 1-3
86. Musnad Ahmad Ibn Hanbal, Sahih Bukhari, Sahih Muslim and Ibn-e-Maja.
87. Ibn Al-Athir Kamil, Fgypt, ratba Bulaq, 1274 Hijrah, Vo., 2 p. 154
88. Qur'an, 4 : 128

LAWS OF PEACE AND WAR IN ISLAM

By

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Laws are the rules of conduct according to which life of a community or a group of communities is conducted. According to the Western jurisprudence, law has emerged "out of .... and alongwith .... the life of the community ..... [1] ". Inspite of this dictum legal continuity does not go back very far, in Europe, because as they say, "Legal memory is not supposed to exist prior to the year 1189 A.D.". Muslim Law, however, "Is the revealed will of God, a Divinely ordained system preceding and not preceded by the Muslim state, controlling and not controlled by Muslim society". [2]

It has its advantages. "For the many different peoples who contribute the World of Islam, the Divinely ordained Sharia represents the standard of uniformity as against the variety of legal systems which would be the inevitable result if law were the product of human reason based upon the local circumstances and the particular needs of a given community" [3] Quran has said "verily this nation of yours is one nation". [4] This means that, The Muslim nation is to be, for all times to come, to be governed by the Laws emanating from the same source. Because the society and its socio-economic structure are the creation of "the Law" itself, therefore, there is no difficulty in retaining the cultural and socio-political similarity among Muslim peoples, all the world over. This is the reason why Muslims, all the world were have more in common than differences resulting from the incident of geography. This has been possible because the Sharia has the element of permanency and in a way, eternity in its very essence[5]

It cannot be denied that there are aspects of human life which are subject to the vagaries of the changing conditions as a result of shift in time or place. Careful study reveals that such aspects of life have been excluded from this External Law. The Prophet, has for that very reason said, "When Allah has not expressly ordained on a matter, it is best not to probe into it." Whether we consider Law of Peace or Law of War, we have to keep in mind the finality of Prophethood and of Revelation. Quran is the last Message of Allah and the Prophet's conduct in life is the last Divinely Inspired guidance available to mankind. Hence to look for details of legal directives for all occasions particularly those influenced by the oft changing condition of life due to differences in time and place, would not only be futile, but contrary to the principle of Finality of Prophethood.

The Quran, as a result, inspite of the changing conditions spread out over fourteen centuries, "has invariably kept its place as the fundamental starting point, and the dogma of Unity of God has always been proclaimed therein with a grandeur, a majesty, an invariable purity and with a note of sure conviction,

which it is hard to find surpassed outside the pale of Islam... [7] " because according to the author " Islam is a religion that is essentially rationalistic ". This rationalisation has added to the permanency which is essential to the " Last Revealed Word of Allah ".

The Laws of Islam start with the individual himself and go on to the problems of Society and eventually of the entire mankind. Man, who has been created as the Vicegerent of Allah, [8] and endowed with the most balanced stature [9] has before him the unique journey culminating in the conquest of the very elements of which this Universe is made. It was in fact created by Him for the benefit of man. Man was then bestowed with knowledge, which when developed by him, to the fullest extent, will enable him to fulfil the object of his creation. The Prophet (SAW) has directed all Muslims to seek knowledge as a religious duty. This process should continue from cradle to the grave, even though it becomes necessary to undertake journeys to the extreme and unknown corners of the Globe. This stupendous task cannot be fulfilled if mankind is unable to live in peace, in general, and peace of mind, in particular.

The very first declaration of an individual when entering the fold of Islam, the unadulterated belief in Allah, [11] gives him all the self-confidence and peace of mind that he will need in the pursuit and progress of physical, mental and spiritual development throughout his life. The moment he recognises the sole Sovereignty of Allah in this Universe, he ceases to fear the millions of false gods, in the form of attractions, that doggedly follow the footsteps of man. This acceptance of the Sovereignty of Allah absolves him of the responsibility of accepting and following any man-made laws, contrary to or not in conformity with the Word of Allah. It also gives him the courage and confidence to face the World at large. It is this peculiar concept of " the existence of God ", which distinguishes Islam from other religions. It is " His Sovereignty absolute— His Power limitless....the conviction that amidst all chaos and confusion and disorders of the world....there is nevertheless, an ultimate Will, Resistless Supreme,.... that it is which....gives at once that backbone and character that firmness of determination and strength of will, and also that uncomplaining patience and submission in the presence of the bitterest misfortune........ " [1] to the Muslims. Man is not flesh and bones alone. He has a will which takes its strength from the Will on which he establishes and lays his Faith When he says, " He is Allah, than whom there is none other to be obeyed, the knower of the visible and the invisible. He is the Beneficient, the Merciful He is Allah, than whom there is none other to be obeyed, the Sovereign Lord the Holy one, Peace Incarnate, the keeper of Faith ; the Guardian, the Majestic the Compellor, the Superb, ... ". [12] Peace, within the mind and soul and abroad, is the natural outcome of a belief as this. Belief in the Majesty and Power coupled with mercy and Benevolence of Allah [13] is mirrored i

the mercy and benevolence of His Last Prophet and Messenger, Mohammad, may Peace of Allah be on him. He was conveyed through Revelation, the Message, the Will and the Law of Allah—and, as such, he was the first to act upon it—leaving behind him, for all times to come, his life and the manner in which he lived it, as a model to the Believers.

The next step after the peace of mind of the individual is the establishment of "Peace" within the society. This is to be achieved by conducting the affairs of the society the establishment of Sharia—the Law given by the Almighty Allah Himself. The Injunctions regarding the establishment of the Law given by Allah are clean :—

> Who so rules by other than what Allah has Revealed ; Such are the disbelievers [14] And judge between them (*i.e.* carry out the duties of governing them) by that which Allah has revealed and do not follow their desires away from the truth which has come to you. (from Allah)[15].

> Sovereignty belongs to Allah alone. He has commanded that none but He should be obeyed.

This is the right religion, but most men know not. [16] The very fact that the society is being administered through the Will and Law of Allah, for the people, and by the people, who believe in Him as the Creator, the Sustainer, the Lord of the day of judgement and arrange their individual lifes in accordance with it, removes, to a large extent, the possibilities of causes of friction arising within the society. There are, however, specific orders in this field. "Obey Allah, and obey the Prophet and those from amongst you charged with the conduct of affairs." [17]

It would not be possible in this brief essay to give all the Laws governing a Muslim society. They all, whether injunctions of Quran, or sayings and precepts of the Prophet (SAW) aim at maintaining an atmosphere of peace, equality and justice at levels. Whether it is the conduct of spouses in a household or of the parents and their children it is clear that the aim is to keep a balance among all members of the family by giving them duties and right commensurate, with the position, capabilities and responsibilities of each one of them.

> Allah does not place responsibility on a soul beyond its capacity. [18]

The relations of man and women or in other words of husband and wife have been made pleasent only since the advent of Islam and the rest of the world following the example of Muslim societies :—

> And women have rights similar to those of men over them in kindness, though men are a degree above them. Allah is Mighty, Wise. [19]

The generation gap seems to have existed between generations even then as now, but inspite of the changing conditions and shifting moods of youth in

every age, the young are ordered to be considerate of the parents who have brought them up with love and affection, even though they may have failed in certain respects.

> If one of them or both of them attain old age with thee, say not "Fig" unto them nor repulse them, but speak unto them with gracious word.[20]

When man steps across his threshold and joins his compatriots in the communal life he is ordered to keep his behaviour of a friendly nature.

> Allah does not love harsh speech except from some one who has been wronged.[2]

The importance given to honest and fair dealings in trade and commerce and the insistence on having witnesses at the time of transactions shows the importance given in Islam to a peaceful atmosphere in Society. A society flourishes or disintegrates as a result of the homogeniety or lack of it among its individuals. A peaceful atmosphere, feelings of brotherhood which means sharing of the good things and putting up a united front in times of adversity, is the ideal for which an Islamic society has to aspire as a united body.

> All Muslims are brothers (to one another). [22]

The Injunction of Quran, to obey Allah, the Prophet (SAW) and men of authority, removes all possibilities of friction amongst members of a society thus providing them with that ideal peace of mind which would assist them in the pursuit of their affairs and aid them in their mental and spiritual development. This Injunction has a permanency and a force of legal Enactment, in the nature of an inviolable clause of The Constitutional Law of an Islamic State, which has not been appreciated always. The Prophet (SAW) like all men had to die. The Law of Allah, through the Quran was to remain in its pristine purity as long as humanity continued to exist. Allah has promised that He will guard it in all its aspects. The Law has to be continued through those who accept it as the Code giving directions to their individual and collective lives. Hence the need to lay it down for ever that those accepted as rulers or administrator of the affairs of a Muslim community have to be obeyed in their decisions arrived at in the light of Quran and Sunnah of the Prophet (SAW). It gives to those charged with the administration of communal affairs, full powers, to exercise their discretion and wherever Quran or the practice of the Prophet are silent on a legal point, their decisions, orders and directions have the force of law. There is the well known case of the parting instructions given by the Prophet (SAW), to Maaz bin Jabal, the Governor designate of Yaman. The implications of instructions given to Maaz bin Jajal, when read with the Ayah, 4 : 59, are far reaching, and would, to a certain extent, permit various parts of the World of Islam to retain independence in matters of Ijtehad. This would mean the acceptance of the principle of the co-existence of more than one

interpretation of Quran and Sunnah due to differences in time and place. It would not, however, permit of more than one interpretation at one and the same time at any place. This, in terms of modern legal terminology, amounts to the denial of more than one interpretation, *i.e.* Shariah, at any one time in a given place. It would also mean that only one set of laws can prevail in any one state.

The principle of finality of Prophethood and the finalisation, perfection and eternal aspect of Quran, has a great significance in the maintenance of "Peace" at all levels. The individual, as a result of belief in the perfection of Islam, has no mental reservations or fears that the Divine Message, that he has chosen to follow may not be the final one. There is as for as a Muslim is concerned, going to be no more Prophet (SAW). Religions which do not contain the "finality of Prophethood", as a basic tenet of belief place their adherents in a State of anxiety regarding the continued application of the Laws they follow. Belief in the appearance of a Prophet (SAW) at an unspecified time in future, as a basic tenet keeps their followers in a state of un-certainty and the appearance of every claimant to the exalted position of the Promised Messiah, puts them in a very vulnerable position. The "finality of Revelation" in the form of Quran and Sunnah gives to an un-imaginable "Peace of Mind", and to an Islamic Society, an anchor which keeps it stable and a cementing force which removes unnecessary friction amongst its individuals.

This principle of the "finality of Prophethood" plays an enqually important part at the international level. It gives uniformity to the Laws of the nations which have accepted this Divine Message and a powerful broad base of international brotherhood which can give both moral and material support to its members, however small or weak they may be individually. The life of the Prophet (SAW) is truly a model life. He went through all the stages of life, an orphan, a merchants, a husband, a preacher, a general and the head of an independent State. Born an orphan, who soon lost his mother and grandfather, and was taken care of by an uncle, who was himself not very affluent, he took to trade very early in life. His dealings in trade and commerce and his upright character in all social affairs gave him the title of Ameen—the Trust-worthy—amongst a people who inspite of their many failings in other directions, were brave, courageous, upright, straightforward and frank in their dealings. Later when he summoned them to the New Way of life and they treated him roughly he bore the persecutions against himself and his followers, with the patience and forbearance worthy of his eminent position and not once leaned in any direction other than that of "Peace".

After migrating to Madina, and as the unanimously accepted head of the newly established State of Madina, he offered the most generous terms to the Jews and other non-Muslims. The emphasis on peace, with honour and justice,

In the Charter of Madina, bestowed by him to the people of Madina, provides ample evidence of the great importance he gave to "Peace", in the communal life of a mixed society of varying beliefs.[24]

The Quraysh did not like the establishment of an Islamic State so close to Mecca. They, as a result, declared war against Madina and invaded its territory. The manner in which he accepted the challenge of his former persecutors and the confidence with which he marched forth to various battle fields to forestall and defend against the invaders of his newly established state, is a pointer to the principle that peace is the objective but not at any cost. Peace with honour and justice alone provides chances which can turn it into a lasting peace. He had on all occasions less than one third, the number of the invaders, and his army was never equal in either armaments or experience but he did not accept the domination of the evildoers because he sincerely believed in the Sovereignty of Allah, who had ordered. "Do not obey the disbelievers but strive against them herewith with the greatest endeavour". [25]

His conduct at Hudaybiya goes to prove that even when he was in an advantageous position and at the very gates of his enemies he preferred peace and avoided a quick victory because such a victory would not have brought about a change of hearts and a lasting peace. There is no other life, in the entire history of mankind, which can be set as a model for a life of Peace, Love and Mercy. He has been rightly called, "Mercy to the Universe". [2] "Life" lead in accordance with his precepts will give peace of mind to the individual and peace to the society, even when man goes to live on plants hitherto unsurved.

War and peace are two distinct conditions of human society which are governed by the beliefs, attitudes and behaviours of men controlling the affairs of various societies. It would be natural to say that "Peace" should be the objective of all human beings but it appears that this objective is not often kept in view. All societies should have a clear concept of what is the ultimate object of creating the structure of their society and the manner in which they desire to solve their collective problems. Most societies have some form of ultimate aim and a Code by which they give direction to their individual and collective lives, but it so happens that while these societies are governed by Laws regarding maintainance of "Peace" within their societies, they do not have any Laws which can give clear direction to them with regard to dealings with other societies and eventually regarding matters related to war.

Islam alone meets this requirement. The object of war in Islam, is, to bring about peace, through the minimum use of force. That is the reason why wars fought by Muslims have been less sanguine and the peace resulting from their sucessful wars has been better and more beneficial and fruitful to both the victor and the vanquished than the prewar period.

Having had a brief look at the Laws of Islam pertaining to the maintainance of "Peace" among a Muslim society it would be pertinent to look into the Laws governing the relations between societies, *i.e.* Laws relating to foreign Affairs of a Muslim State, and of war. This would involve the outlines of principles to be followed by Muslim States in the conduct of the their dealings with other Muslim States and also non-Muslim States.

Peace at the International Level

The basis of peace at the international level is on the acceptance of the principle that all possible causes and chances of friction between societies and nations must be avoided. If friction between nations is to be avoided then friendly relations must primarily be established between like-minded peoples. This would mean that Muslim states should give perference to having cultural and defence organizations among themselves. The Laws on the subject are:—

O ! you who believe !

Do not have friendly relations with non-believers in preference to Believers.

Al-Nisa 4:144

History has proved that whenever Muslim states had frindly relations and pacts with non-Muslim states the result was war between the Muslim states themselves. The enemy even when on seemingly friendly terms will try to undermine your strength by creating rift amongst you. Hence the categorical order :—

O ! you who believe !

Do not befriend my enemy and your own enemy

Al-Mumtahina 60:1

Friendly relations, pacts and international organization lead to acceptances of Laws, not in conformity with nations' own " Laws.", This amounts to obeying those non-Muslim organizations with whom a Muslim state may have executed a pact. And if you obey them, *i.e.* their " Laws ", it may amount to disobedience of your own " Laws " derived from Divine Revelations :

O ! you who believe !

If you obey those who have rejected the truth they will make you turn you back on your heels and you will be the losers.

Al-e-Imran 3:149

This will eventually lead to disturbances as in the past. It was always the result of following misguided policies.

On land and Sea disturbances have taken place (in the past)

These were the result of means' own doings.

Al-Room 30:41

You should not have treaty relations with such people because if they go to war against a Muslim state and you feel that you are duty bound to go to their help this treaty of yours with the non-Muslim state will prevent you from going to the help of the brotherly Muslim state, which in fact is your duty :—

> If they (the Muslims) ask for your help in the matter of religion (Jehad).
>
> It is your duty to go to their help except against a people who have treaty relations with you.
>
> Al-Anfal 8:72

Islam gives a high place to the fulfilment of pacts, promises and treaties, whether at the individual level or between societies and states. The world is poorer, and mankind lagging behind in the achievement of its object—the conquest of elements—because nations have kept their interests formost, and have brought about untold miseries by breaking promises, and thus ignoring principles of honesty, truthfulness and righteousness, in communal and international dealings.

Those who have littel respect for solemn undertakings should not be trusted with important matters. There is an Order which forbids friendly and intimate relations with non-Muslim , because they do not respect the trust placed upon them. This Order mainly applies to problems at national and international level. It says :—

> O ! you who believe.
>
> Do not take into your trust, other than from amongst yourselves (*i.e.* Muslims). Al-e-Imran 3:118.

They will do their utmost to harm you (by misusing the trust and failing to maintain the high standard of honesty and truthfulness).

They are pleased at your loss

Their tongues show enmity towards you. (The Hindu, Jewish and the Christian propagandists, have been for centuries showing, their hatred of Islam, through press and public utterances alike).

Al-e-Imran 3:118

As far as the Muslim States are concerned, they being parts of the same nation, have to act as one super-State :—

> Verity the Believers are brothers.
>
> And if any of them fall out then it is your duty to make pace between your brotheren.
>
> Al-Hajarat 49:10

Allah promises that if you follow these directions regarding international relations, you as the United States of Muslim Ummah, will be able to fulfil your task of acting as the arbitraters in the affairs of mankind. Allah says :—

> It is in this manner that we have made you the Nation following the "Middle Path" so that you can act as witnesses (and mediaters) in the affairs of mankind.[27]

Having had a very brief look at the principles governing the Laws of peace-time and having realised the importance given to Peace by Islam, both at the national and international level, it would be in the fitness of things to see the attitude of Islam towards war. There are very few religions or schools of thought, governing the existing Ways of Life, which deal with the subject of war adequately. Islam alone has laws governing this very important aspects of life. It would not be possible to discuss all the Laws pertaining to war in this brief essay but it would not be out of place to briefly touch upon the Laws covering the "When, Why and How of War," as dealt with in Islam. War is the impassioned drama of blood, sweat and toil, played between human groups, when mass killing is undertaken This happens when normally each side is supposed to be keen to preserve its interests. In Islam, human life is too valuable to be shed at the alter of national or any other material interests. Islam does not recognise any justification in shedding blood for anything but truth and for eradicating evil. Quran considers human life as a Sacred trust. It lays down Laws, for all times to come, for the safeguarding of humanity from mischief :—

> Whoever kills a human being except as a result of manslaughter or corruption in the land, it will be considered as if he has killed entire mankind.[28]

This sanctity of life hold goods for all occasions and even propagation of religion does not permit shedding of human blood, because Islam, the Religion of Peace, holds "Peace" dearer than bolstering up the ranks of unwilling comrades. The Law on the subject is simple and unambiguous. It says :—

> There is no compulsion in religion.[29]

No threat of physical nature of economic pressure can be used to force people to embrace Islam. Therefore, to maintain that Islam has been spread by the Sword is entirely against God given Islamic Law. Once a person has embraced Islam he has to obey all Islamic Laws or Laws promulgated by Muslim administrative authority empowered to legistate, in accordance with Ayah 4:59

The permission to take human life for manslaughter or mischief in the land takes the shape of Laws for the conduct of war when evil becomes widespread to the extent of naked aggression in the shape of either invasion or persecution of the weaker elements of society. If this was not so then persecution, massacres and disturbances would become the order of the day. As Quran says :—

> Had it not been for Allah's repelling some men by means of others, cloisters and churches oratories and mosques, wherein the name of Allah is oft mentioned, would assuredly have been pulled down.[30]

Surely this state of affairs would be the correct use of force and this is what in Islamic terminology is called Jehad. It is a subject complete in itself putting down the occasions when and why Jehad has to be declared, the scale and the manner in which it has to be conducted and when it must be terminated. These laws covering the various aspects of war are Eternal and no authority in any Muslim state can alter, amend or abrogate them. A brief perusal of these laws would show how war itself has been employed as a means to bring about peace.

When to Fight

The most clear and categorical order for the Muslims to go to war is this :–

And, fight, in the Path of Allah,
Those who fight you.
And do not be the aggressors
Allah does not love the aggressors.

Al-Baqar 2:190

This is not a permission but an " Order ", a Law, clear and concise which has no ambigiuity. If the Muslims are invaded, which means that any part of the World of Islam is invaded by a non-Muslim power, it becomes the religious duty of every Muslim to join in the ensuing war to repel such an invasion.

Such a war has been termed as a war in " the Path of Allah " and merites excellent rewards both here and in the hereafter. It is a war in " the Path of Allah ", because it is in defence of a people who " Order good deeds and prohibit evil " (3:110).

They all have to fight to repeal such an invasion because they are " One Nation ", and their obligations are common. They have been ordered elsewher to prepare for such occasions, as we shall see later. The thing to remember is that Muslims have to go to war when any prt of their domains is invaded but they can neither initiate war nor be guildty of excesses of any sorts during war.

The other occasion when the World of Islam is expected to go to war is to put a stop to persecution of a weak people, even though the persecuted are not Mulsims. The Law on the subject lays down :–

How is it that you do not fight
And there are the (persecuted) weak
from amongst men, women and children
Who are saying; O our Lord, take us out of this land
the people of which are cruel (persecuters)

Oh, give us from thy Presence some protecting friend.
Oh, give us from Thy Presence some defender.

Al-Nisa 4:75

Who else could be such a defending friend than the Muslim nation whose individuals have all declared that :—

Lo ! My worship and my sacrifice
and my living and my dying
are for Allah, Lord of the Worlds.

Al-Anam 6:163

Here again the task is expected to be fulfilled by the entire Ummah. It is upto the Muslims, as a nation— Ummah—to prepare on the Global scale to meet aggression and eradicate evil.

Apart from these two occasions there may arise occasions when a mischievous nation break solemn treaties and endangers peace. Such nations have to be punished judiciously at the appropriate time.

And if they break their pledges
after they have made a treaty (with you)..
And assail your religion
Then fight the leaders (leading nation)
from amongst the disbelievers.
Certainly they have no binding oaths
(In this way) they may desist.

Al-Tauba 9:12

There are some nations, who break their peace treaties hoping to conquer more lands of their neighbours. They must be dealt with strongly by the Muslim Ummah jointly. The orders are :—

Those of them with whom you have
made a treaty and at
every opportunity they break their treaty,
Sooner or later they will give an
opportunity (to you) to meet them (in war).

And when you find them in war.
Deal with them so as to strike fear
in their
supporters (and future generations)
This way they will remember.

Al-Anfal : 8:56-57

Quran being eternal, there had to be orders for occasions not being faced during the life of the Prophet but which have been faced many a times since. The first of these is when one Mulsim country is attacked by disbelievers and asks for help from another Muslim country. The orders are that the country whose help has been asked for, must go to the help of the other, provided it has not signed a peace treaty with the other belligerent.

And if they ask your military aid
you must help them except against a
nation between whom and you there
is a treaty.

Al-Anfal 8:72

This proviso shows the importance of the sanctity of treaties.

That is one of the reasons why it is forbidden to have peace treaties or to be part of non-Muslims blocks who are likely to go to war against another Muslim country.

O you who believe
Do not take disbeliever as friends
in preference to Muslims.

Al-Nisa 4:144

There is yet another occasion when the Muslim Ummah as one entity must go to war and this happens to be against another Muslim country.

If two parties (countries) of Muslims go to war then make peace between them. And if one of them wrongs the other (Acts against the decision of the peace makers). Then (all of you fight against the one which does wrong until the wrong doer returns to the Ordinance of Allah (the decision of the Ummah).

Then if it returns (to the right path) (you must) make peace between them justly, And act equitably. Allah loves the equitable.
Al-Hajarat 49 : 9

The believers are brothers. Therefore make peace between them Observe your duty to Allah that ye may obtain (Allah's) Mercy.
Al-Hajarat 49 : 10

The fulfilment of this Divinely ordained duty demands the creation of an international authority of the Millah which can undertake the duties of making and keeping peace between Muslim countries. The Muslims, so far, have been gulity of not creating such an organization.

People Whom Muslims should not fight

It is logical to deduce from the above that those who have not invaded any part of the World of Islam and who are not guilty of persecution within their borders should not be attacked by Muslims. There are, however, a few specific orders in this respect. One of these orders lays down that you can attack the trouble giving unbelievers :—

Except those who have joined in peaceful relations with a people between whom and you are treaty relations (*i.e.* the friends of friendly nations have to be left in peace) or (those who) have come to you because their hearts forbid them to make war on you or their own people. (*i.e.* wish to remain neutral).

This Ayah ends by the words :—

> So, if they hold aloof from you and do not wage war against you and offer you peace Allah does not allow you permission (to fight) against them (even though they were guilty earlier). (Al-Nisa 4 : 90

This injunction of Allah forms the basis of the policy of Muslim Ummah and Islamic states ordering the affairs of their governments in accordance with Quran and Sunnah. The first part of this Ayah was demonstrated in practice, by the Prophet (SAW), at the time of and after the signing of the Peace treaty of Hudaibiya. Those who joined the Meccans were left alone and were not punished for previously invading Madina. The campaign againt Khayber was the result of the Jews of Khayber failing to benefit from this peace and their earlier aggression against Madina coupled with their plans for the future sealed their fate. Had they joined the Meccans in the Treaty of Hudaiybiya, they would have been declared immune from attack by the forces of Madina.

The other injunction of Quran, more or less, forbidding to go to war against un-believers is more in the nature of permitting friendly relations with those non-Muslims nations who have not committed an unfriendly act against Muslims. It says :–

> Allah does not forbid you from (friendly) relations with nations who have not gone to war against you on account of religion.
> Al-Mumtahina 60 : 8

Any people who claim to be Muslims even though they may not have declar so before the war started, should not be attacked until on enquiry has been made into this claim of theirs. The injunction is :—

> O you who believe. If you march out to war in the Path of Allah.
>
> Be careful and discriminate and if some say they are Muslims, do not say that they are not Muslims.
>
> Al-Nisa 4 : 94

This was the reason why the Prophet (S.A.W.) never attacked an enemy camp or a habitation until the sunrise, in case there was a group in the habitation or the camp who were Muslims. If he did not hear the call to morning prayer he attacked at sunrise. He followd this practice even at Khayber, although he had arrived outside some of the forts during the night.

Justice being one of the basic principle of Islam every action whether in peace or war has to avoid injustice. Although this is an injunction is relations to foreign affairs it has indirect bearing on Jehad and may be quoted here :—

> O you who believe : Be steadfast witnesses for Allah in equity. And let not the hatred of a people lead you to deal with them un-justly. This is nearer to your duty. (to Allah) Observe your duty to Allah.
>
> Al-Maeda 5 : 8

To Whom is the Order to fight in the Path of Allah

The order to fight is clear. War has been enjoined on the Muslims and the conditions under which they must fight have also been explained in detail, It is to be realised that the orders regarding Jehad cover the entire World of Islam simultaneously and are not meant to be confined to any part or parts only. The order to look after defence covers the defence plans of the whole Ummah. It says :—

> O you who believe! Take defensive measures Then advance in parts or advance all-together
>
> Al-Nisa 4 : 71

The order is clear. The defence plans of the entire World of Islam are to be made as one entity and when aggression takes place then the field is to be taken according to the needs of the occasion and the plans already made. It is a National War of the Whole Ummah and is total both in respect of men, material and the area it covers. The first total war in the history of war was fought by the Prophet (S.A.W) during the period of his stay in Madina.

A question may be asked that if Jehad, when announced by the appropriate authority, is an incumbent duty on all the Muslims, then is it necessary that all should take the field together. The Law in this respect is clear. The armies of the World of Islam have to take the field in accordance with the needs of the occasion. It says :—

> It is not necessary that all the Muslims should march out together. Why not send out a party from every one of them (*i.e.* from every country of the Muslims) So that they learn about the facts of religion (*i.e.* Jehad) (and acquaint themselves with the latest developments in the art and weapons of war.)
>
> And when they return to their people (nation or country in modern sense) they can warn them (regarding the weapons and methods used by the enemy) So that they may be warned and take adequate defensive measures.
>
> Al-Tauba 9 : 122

But it must be borne in mind that the overall plans should be so made that the nearest Muslim nation to the point of aggression takes the field first of all, so that the plan can be implemented in a proper manner, and no part of the World of Islam is taken by surprise. The injunction of Quran lays down :—

> Those who are nearest to you (the Invoders) must be engaged by you (first).
>
> Al-Tauba 9 : 123

This Law regarding the engagement of the enemy by the closest country to enemy aggression is a strategic requirement and does, in no way, absolve the rest of the World of Islam from its obligations regarding defence of the Millah. Quran had laid down that :—

> " Verity, this Ummah of yours is ONE Ummah. "
>
> (23 : 52)

The addressee being the entire Ummah and the lands of any portion of the Ummah being those of an integral part of the Ummah, a war, imposed upon or undertaken by a section of the Muslims becomes the National War of the entire Ummah. As mentioned earlier the concept of a national War and on a scale of totality was first presented by Quran and was demonstrated, in all its aspects by the Prophet (SAW) himself.

History has proved that due to vested interests of the various non-Muslim communities the Muslims have to get united if they desire to exist as Muslims. The nationalist movements of 19th and 20th centuries split up the World of Islam into fragments only to be swallowed up by those who had created the rift by propagating geographical and racial nationalism among Muslims. These upholders of nationalism, however, showed their true colours soon and subjugated the various fragments into which they had rendered the World of Islam. Quran had warned against the machinations of such mischief makers. It had said :—

> And if they find you they will be your enemies and show their hands against you adversely. And their tongues to harm you. (In the form of propaganda). and they will desire that you also become unbelievers.
>
> 60 : 2

Quran had further advised the Muslims to face the enemies of Islam in a joint manner. The past fourteen centuries show a record of continuous opposition to Muslims. The Quraysh opposition to Islam was joined by the rest of Arabia. Soon the two mighty powers of Eastern Romen Empire and the Persian Empire forced the Muslims to engage in a war on two fronts. Later the Mongals offered their services to Christian Europe against the Muslims. In India the the Hindus, an every occasion offered their services to the Europeans against the Muslims. Today the World of Islam finds itself in cleverly arranged trap engineered by the Isrtaelites, and aided by Christian West, the Socialist East and Hindu India. Allah had laid down that Muslims should, Engage (Fight) the Polythiests jointly

> As they fight you jointly
>
> Al-Tauba 9 : 36

Fighting singally and in a disjointed manner can only result in defeat in detail. The non-Muslims nations by making friends of some parts of Islam were able to divide the World of Islam and eventually to conquer the whole of it one after the other. Quran had warned against this.

> O Believers do not take the unbelievers as friends in preference to Muslims. Do you desire to take upon yourselves clear blame
>
> 4 : 144

The Muslims have taken this clear blame, on themselves, during the past few centuries. Having warned that the non-Muslims will always be on the war path against you. He has Commanded that the Muslims, as an Ummah, should

prepare against attack from their enemies. After having warned that the un-Believers will always break their solemn treaties but the Muslims should not be afraid of them. Instead He has laid down the Law that the Muslims should always be in a high state of preparation for war. He says :—

Prepare for them to your utmost capacity and of the Armed Forces and of lines of steeds (means of locomotion) So that, with it all, you dismay (to the extent of being a deterrant) Enemy of Allah and your enemy And others besides them, whom you do not know, but Allah knows them And whatever you spend in the Path of Allah (The heavy expenditure that you will incur) will be repaid to you and you will not be wronged. (When you are safe from enemy aggression Allah will send His Bleassings manyfold).

Al-Anfal 8 : 60

Motivation and Morale Building

Apart from physical and material preparation a great feal of motivation and morale building is needed to prepare the Ummah for Jehad—fighting in the Path of Allah. The beginning of morale building is made by making every individual feel the Oneness of Allah, His Sovereignty in all matters and that He alone can render assistance to His devoted slaves. The next point brought forth is that the affairs of this world are temporary and, therefore, it would be futile to hold back from achieving martyrdom due to the desire to live a little longer in this world.

O you who believe. What is wrong with you that when it is said to you " Go forth in the Path of Allah " (to fight) you fall flat on the grend. Do you take pleasure in the life of this world rather than in the hereafter. The riches of the life of this world are but little as compared to the Hereafter.

Al-Tauba 9 : 38

After explaining the importance of fighting in the Path of Allah the Quran places the Eternal Truth before its readers that even if you feel that you can postpone your death by avoiding participation in Jehad, you can be certain that death will eventually catch up with you :—

Where so ever you may be death will over take you, even though you were in lofty towers.

Al-Nisa 4 : 78

The Prophet (SAW) was directed to motivate the Ummah to take part in Jehad in the Path of Allah, in addition to taking part in it himself. His responsibility, however, was limited to motivation of others and taking active part in it himself. Those who evaded Jehad were responsible for their dereliction of duty themselves.

So fight (O Mohammad S.A.W.) in the Path of Allah You are not responsible except for yourself. And exort the Muslims (for Jehad)

Al-Nisa 4 : 84

The Prophet (SAW) apart from shouldering the responsibilities of Prophethood, also held the responsibilities of the head of the state of Madina. As such any directions issued to him, as the head of the State of Madina, have to be taken over by the rulers of Ummah for all times to come.

Exortation to Muslim and constant motivation of the people, to prepare for and take par. in Jehad, thus becomes a duty of the Muslim states. In modern terminology it may be called as the phychological strengthening of the will of one's own people but the rules of conduct laid down by Allah and the Prophet with regard to truthfulness and regard of moral values cannot be broken or disregarded under the excuse of wartime necessity. Quran is very clear in this aspect of reactions of other nations to Muslims remaining on the right path, It says :—

And they will not cease fighting against you till they have made you renegades from your religion if they can.

Al-Baqar 2 : 217

and

O you who believe ; If you obey one of those who have received Scriptures they will make you renegades after having believed.

Al-e-Imran 3 : 100

and again

O you who believe : If you believe the unbelievers they will make you turn back on your heels, but you will turn back as losers.

Al-e-Imran 3 : 149

It must, therefore, be understood that whether an individual or the leaders and rulers of the Ummah like to march to the battle field or not, they have to accept the challenge of an invador. If the Muslims fail to take up arms in defence of themselves and their domains they will find that they cannot live as Muslims. A surrender would amount to accepting the laws of the conqueror. Sovereignty belongs to who-so-ever succeeds in establishing his laws. There is a clear warning against accepting to follow the will or the Laws of the non-Muslims.

To safeguard Muslim in the preservation of their faith they have been ordered to refuse obedience of the Un-Believers.

Do not obey the un-Believers

Al-Farqan 25 : 52

The only way to refuse to obey the un-Believers is to take up arms against such aggressors and not to believe in passive resistance.

Implications of Fighting in the Path of Allah

The Injunctions regarding going to war, whether to counter an invasion or to free a people form persecution in this respect are clear that in both cases such a war will be "A War in the Path of Allah". A war in the Path of Allah must be conducted according to the Laws given by Allah. Any action failing to observe the limits laid down by Allah or the practice of the Prophet will debar the war to be classified as a war in the Path of Allah.

The reason why such " fighting " has been called as, " A war in the Path of Allah ", has been touched briefly earlier on. It may be added that any effort, any sacrifice made of person or property and thus every war fought to save or protect Allah's Creation from persecution would be an effort, a sacrifice and a war in the Path of Allah. An Ummah which has the qualities of being the best ever created Ummah, which directs human affairs along the right path and prohibits evil, and is a witness to the actions of other nations, has under all circumstances and at all times to obey the Laws laid down by Allah himself. In this condition is fulfilled, Allah, in return, helps such an Ummah.

Can Muslims avoid War if not fully prepared

Not being prepared is no excuse for not fighting in the Path of Allah :—

> March out whether lightly armed for heavily armed
> And fight with your wealth and your live in the Path of Allah
> That is bestfor you if you know.

Al-Tauba 9 : 41

History tells us that whenever the Muslims marched out with determination they were able to exists as independent and sovereign people. When they failed to fight in the Path of Allah they were made slaves and lived a miserable life. They had been warned about the consequences of failing to take part in Jehad (9 : 39). Those fighting in the Path of Allah are the force of Allah and they cannot be beaten.

Al-Maeda 5 : 56

It is not unknown that small but determined forces with faith in Allah defeated much larger forces.

> How many times a small force has overpowered a large force with Allah's permission. Allah is (always) with the steadfast.

Al-Baqar 2 : 249

These were 313 against 1000 at Badr, 3000 against 12000 at Khandaq and 3000 against 2,00,000 at Mauta where a well trained and heavily armed army of the then strongest power on earth was routed by a poorly armed but well trained, disciplined and steadfast Army.

The Question of War booty and Prisoners of War

The disposal of war booty has been a recurrent problem in all armies. Even generals of the allies during W.W. II had to be repremanded for indulging in collecting booty. Kitchner ordered the looting of Khartoom and the digging up of the tomb of Mehdi Soudani and sent the best part of the booty to his house in England. This is so because except Islam no religion lays down strict rules for the disposal of war booty. Quran lays down that war booty is the property of Allah and the Prophet (SAW) who was the head of the Muslim state then.

> They ask you about the spoils of war say the spoils of war belong to Allah and His Prophet.

Al-Anfal 8:1

The soliders, at that time had to equip themselves and were not a regularly paid army. It was, therefore, ordered that the spoils of war be collected in a central place, one fifth kept for the state and for fifths to be distributed among the Army. The historians have given full details of such distribution at the conclusion of the battles of Khayber and Huna-in. The order containing such distribution is laid down in the Ayah :—

> And know that whatever spills of war you take, One fifth of it is for Allah and the Prophet (SAW) And (its distribution) for the kinsmen (if need be) and orphans and the needy and the wayfarer

Al-Anfal 8:41

All spoils of war were to be considered as lawful. pure and justified.

> Now enjoy what you have won, as lawful and clean.

Al-Anfal 8:69

The prisoners of war have been given special attention in Islam. Quran and Sunnah have both encouraged winning of their hearts (تالیف قلوب) and humane treatment has been advised. Quran lays down :-

> O Prophet (SAW) say to those captives who are in your hands If Allah Knowth any good in your hearts. He will give you better than that which has been taken away from you and will forgive you.

Al-Anfal 8:70

Slavery is foreign to the sprit of Islam. Inspite of it the capture and subsequent maintainance of defeated enemy soldier was a problem which could not be-solved except distributing them among Muslim who were to allow them to win their freedom by working for wages in spare time allowed to them for this purpose. It was, however, laid down that none was to be made prisoner except as a result of a well fought out war in the Path of Allah :—

> It is not for any Prophet to have captives until he has made war in the land.

Al-Anfal 8 : 67

This has closed the door to the taking of captives from poor and weak communities. The Prisoners of war, however, could be given freedom by grace or after ransam.

Muhammad 47:4

When to end the War

Regarding the extent to which war has to be continued, the general principle is, that it should continue until the mischief of aggression or persecution, as the case may be, comes to an end. It says :—

And fight them until persecution
is no more
And the Way of life (of peace) of
Allah is established
But if they desist (from fighting)
there be no hostility except
against the cruel (wrong doers).

Al-Baqar 2 : 193

Peace being the ultimate object of Islam any sign of desiring peace by the enemy must be reciprocated :—

And if they incline to peace you
also must incline towards peace.
And trust in Allah, because He
is the Hearer the knower.

Al-Anfal 8 : 61

The trust in Allah is because there is alway the fear of disbelievers having recourse to conning and deceit, but inspite of it Allah is enough for the Muslims :—

And if they will deceive you,
Allah is sufficicate for you.

Al-Anfal 8 : 62

But the ultimate end will be that they will have to be unarmed and in token of their having accepted the overlordship of Muslims and their protection against other sources they will have to accept payment of jazia :—

Until they pay jaziya
willingly and they accept
their low position (to live
under the law of Allah)

Al-Tauba 9 : 29

We have glanced, briefly, at the Laws pertaining to the problems facing the individual, the society, the State and the World at large. It is clear that the Muslims have to keep peace as the aim in all their undertakings. The "Laws" covering war itself are such that the ultimate aim is peace itself. There is no question of the enemy accepting unconditional surrender. As has been brought out the

Muslim leaders have to accept the offer of peace the moment the enemy inclines towards it. Human life, even of the Unbelievers is too sacred to be destroyed when there appears the remotest chance of the errant being reformed. The world at large has, due to inborn prejudices, of some and vested interests of others, coupled with the cooling of fervour of the Muslims, not seen the light, to adopt these Laws in their totality. It is true that due to the impact of Islam over the greater part of the Globe, a great Many of the " Laws of Islam ", have either been adopted or adapted but the full advantage of Islam can only accure if it is adopted as a Way of Life. Mere patch work cannot alter the shape of things. This is the reason why the world, inspite of benefiting, to a certain extent, from contacts with Islam, has been facing great calamities like the two World Wars..

The task, before humanity, of eventually controlling the elements of nature, can only be fulfilled when mankind has overcome the differences based on geography, colour and race. The last fourteen centuries have proved, that, the only philosophy and the only school of thought, which has factually proved that men of different cultures, races, colours and geographical locations can think, act and live as equals has been Islam alone. It, therefore, stands to reason that if mankind is ever likely toreach complete equality and brotherhood it will be when the greater part of humanity has accepted Islam the Last and the final Code of Life granted by the Merciful Allah to His most Balanced Creation.

Islam alone can give unity to mankind. It is the only " Religion or the "School of thought" *which accepts the finality of* Prophethood and Revelation.

As such Islam alone provide a firm base, a set of definite and "Unalterable Laws" and a " Way of Life " which needs no change of Principles as a result of changes in "Time and Places". The truth of this aspect of Islam can be gauged from the silent progress it has been making with the spread of education in the World at large. The past few centuries have been centuries of political weakness for the World of Islam and yet Islam itself has progressed. " In the hours of its political degradation, Islam has achieved some of its most brillient spiritual conquests".[31]

What better proof of its being the "Religion of the future of man knid."

FOOT-NOTES

1. Coulson N.J. A History of Islamic Law, Edinburgh 1964, P. 1
2. *Ibid*, P-1
3. *Ibia*, P-5
4. Q. Al. Ambiya 21 : 92
5. Q. Al.Anam 6 : 34
6. Abdul Qadir Audah, The Criminal Law of Islam, Urdu Islamic Publications, Lahore P. 26.
7. Arnold T.W, The Preaching of Islam, Luzac, London, 1935, P. 414 (Quotation from Edouard Montet, Paris P. 17-18)
8. Quran, Al-Baqar, 2 : 30
9. Quran, Al-Teen 95 : 3

10. " There is none worthy of obeyance except Allah. "

11. Arnold, op, cit P-415 (quotation from " Mankind and Church, by Bishop Lefray, London, 1907, PP 283-284).

12. Quran, Al-Mumtahina 59 : 22-24

13. Quran, Al-Baqar 2 : 218

14. Quran, Yousaf, 12 : 40

15. Quran, Al-Nisa 4 : 59

16. Quran, Yousaf 12 : 40

17. Quran, Al-Nisa. 4 : 59

18. Quran, Al-Baqer 2 : 286

19. Quran, Al-Baqar 2 : 228

20. Quran, Al-Asra, 17 : 23

21. Quran, Al-Nisa, 4 : 148

22. Quran, Al-Hajarat, 49 : 10

23. Quran, Al-Hajar, 15 : 9

24. *See* Clauses 16-21 of the Charter of Madina, Ibne Ishaq, Vol II, pp. 121-122 reproduced by Brigadier Gulzar Ahmed in 'Battle of the Prophet of Allah (SAW), Karachi p. 283-284.

25. Quran, Al-Furqan 25 : 52

25. Quran, Al-Ambiga, 21 : 107

27. Al-Baqar, 2 : 143

28. Quran, Al-Maeda 5 : 32

29. Quran, Al-Baqar 2 : 256

30. Quran, Al-Hajj, 22 : 40

31. Arnold. The Preaching of Islam. op. cit, P. 2

ISLAMIC LAW AND CONTEMPORARY NEEDS

A. INTRODUCTION

Islam developed one of the most sophisticated and elaborate legal system in the history of mankind. It has two aspects : one, it is an expression of the established beliefs, practices and conduct of life, two, it constitutes a system in which new needs and purposes of life can be given effects through agreed principles in ways that limit destruction or dislocation of the conventional order to a practical minimum.

However, when we look back on the series of gradual developments in the conduct of our daily life during the last three decades of our history, we are struck to note that we have regarded Islamic law only in the first aspect, and its other aspect in which it is a process that accommodates change, is often misunderstood, and always ignored. By doing so, we have made it look as an inherent obstacle to progress.

There is a growing feeling now that society should be reordered on traditional lines ; original values should be conserved, and Shariah institutions should be brought to bear on restructuring social, economic and political aspects of life.

B. CODIFICATION

In the first aspect Islamic law covers all things, human and divine. It prescribes everything that a man shall do to his Creator, to his fellow beings, to his neighbours, to his relatives and to himself. To drive Ahkam-i-Sharie, laws for human beings, is the science of Fiqh or jurisprudence, and the person conversant with this science, and the related conventional sciences : Ulum al-Quran, Ulum al-Hadith, Ilm al-Rijal——is called the faqih. The deduction of Ahkam-i-Sharie involves deeper study of the basic principles and sources of legislation—The Quran, Sunnah, Ijmah Qiyas, and rules of justice and equity.

The Quran is the main source of Shariah. Ahkam deduced from it can be divided into five categories :

1. A hukam-i-Sharie, the omission of which is punished and the doing is rewarded, is called fard or wajib, or necessary.
2. A hukam-i-Sharie, the doing of which is rewarded but omission is not punished, is called mandub or mustahab or recommended.
3. If a hukam-i-Sharie is legally indifferent, it is called jaiz or mubah or permitted.
4. When a hukam-i-Sharie forbids an act, and it is punishable by law is called haram or prohibited.
5. When a hukam-i-Sharie is to disapprove certain act but not under penalty is called makruh or dislike.

The Quran places man at the highest among the countless creatures on the earth. Although it recognises the difference between man and man in terms of intelligence, health, wealth, strength and morality, it provides a "guided living and consumption pattern" for all, to minimise the social inequalities in which an individual can be debased, foresaken and forced into servitude.

The Quran provides legislation good for all people at all time. It does not impose any thing beyond the capacity and power of humanity. It ensures the realization of justice in its full capacity, in a way that makes all safe and secure. It does not apply the theory of prejudice in using rights, nor it looks at the personal side of a matter but rather prefers to add a subjective and universal view to a situation.

The fuqaha have divided the Quranic text into three forms:

a. that related to Ilm al-Kalam
b. that related to moral principles
c. that to deal with the rules of conduct of human beings.

Thus the Quran is neither merely a book of ethics nor a legal code in the modern sense. The Quran has basic goal to achieve to lay down firm foundation for the establishment of a healthy and peaceful human society to regulate the relationship of man with man and his relationship with his Creator. It is to provide guidance for his social, cultural, economic and political aspects of lie. The laws of inheritance, marriage and divorce, peace and war, punishments for theft, adultry and homicide, all are meant for regulating man's relations with his fellow beings. When the Quran gives directions in moral teachings, it, in fact, addresses to the conscience of man. This is why one finds legal verses mainly to encourage man for the obedience of his Creator by putting a keen sense of His fear in his mind by describing His certain specific attributes such as He is Jabbar, He is Qahhar, He is all-hearing, He is all seeing etc.

Although there are verses in the Quran to the effect that "everything has been mentioned in it", and "nothing has been left out," one may not find laws in details, as a complete system in the Quran. One also finds great emphasis on certain Ahkam such as Salat and Zakat, but does not find their specific definitions or details. So doubts may come up in the minds of our younger generation as to the nature of the comprehensiveness of the Quranic teachings.

C. BASIC PRINCIPLES

The fact is that the Quran, instead of giving minute or detailed bye-laws, gives principles of basic and fundamental nature, which are comprehensive and capable of adopting to all ages. The basic principles presented by the Quran are in the form of theoretical concepts which could be adopted to various socio-economic conditions of any changing society. The Quran gives the society a reasonable prerogative for a detailed legal qualification to adopt itself according

to the dictates of circumstances. It was the responsibility of the Prophet (Peace be upon him) to present the ideal practical life in the light of the Quranic principles. He was sent to be an example of the teaching of the Quran, and every act of his life was an interpretation and explanation of the Quran. A few examples are given below:—

Hukam-i-Sharie about salat is mentioned in the Quran, without relevant details. The Quran did not show the muslims the times for prayers nor the numbers in a day. The Sunnah of the Prophet (peace be upon him) explains us all these details. When the Prophet (peace be upon him) prayed, he looked at his companions and said, "pray as you see may praying."

The same applies to fasting. The Quran ordered the muslims to fast, without giving all details. The Prophet (peace be upon him) defined the month and said that it is a moon month not a sun one, and also defined that fasting starts at dawn and lasts till sunset, and that the month started with the appearance of crescent and ended with appearance of new moon.

The case of Zakat payment is the same. The subject is mentioned repeatedly in the Quran without necessary details, but it was the Prophet (peace be upon him) who determined the amount of wealth on which Zakat was to be levied, its rates and the goods subject to it.

D. INDEPENDENT SOURCE

Moreover the Sunnah is not only an explanation and elaboration of the Quran but also an unchanging and independent source of Islamic law and jurisprudence, closely associated and linked with and secondary to the Quran.

In the second aspect of Shariah, the Quran believes that social development is a never-ending process; society is always in a state of evolution. A system which is static is doomed to die out slowly. It must, for its survival and healthy progress, respond creatively to the social changes which are taking place around it. On this very ground the Quran recognises the need for legislation by man.

In those spheres where the Quran and Sunnah do not provide positive knowledge, greater latitude is allowed to a recognised faqih or mujtahid to resort to analogical reasoning, in which he should be guided by the rules of justice, equity and good conscience, called urf, Istehsan, masalah, Istislah, Istishab, etc. all to meet new situations produced by evolution in the society.

E. THE PAST

During its early stage, Islamic legal system progressed along healthy lines to meet the legal needs of the expanding State. During the Prophet (peace be upon him) period, fuqaha record very few issues which were not clearly mentioned in the Quran, and the Prophet (peace be upon him) had to resort to Ijtihad for their solution. During the Khulafa-i-Rashideen period, bit more

numerous, about five hundred, ijtihadi masail came up. But when the Islamic State expanded to every where, voluntary councils of fuqaha for legislation were established in every educational institution in the great cities of the State. Abu-Hanifa and his council members in the schools of Kufa alone, gave legal decisions on 83 thousand issues, 38 thousand of which were related to Ibadat and the rest 45 thousand for temporal and wordly affairs. The later generations, however, failed to go along the changing situations, and closed the doors of creative thinking. They, by doing so, set the society on the way to decadence, confusion and disintegration.

F. INSTITUTION OF IJMAH

An individual opinion is always open to error. In Islam, it does not angender a positive knowledge. It is not considered a binding force. With reference to the solution of a new issue where the Quran and Sunnah is silent, and a method of Qiyas, Ijtihad and rules of justice and equity are required to be employed, one cannot rule out the possibility of diverging opinions. There is no guarantee that Qiyas and Ijtihad are applied within the limits prescribed by the Quran, and if the interpretation of the text is involved, then it is rightly interpreted. It is precisely the principle of Ijmah that has enabled the fuqaha to get around this difficulty. Ultimately Qiyas and Ijtihad receive their final sanction from Ijmah. It alone can put an end to any doubt. The Prophet (peace be upon him) has anunciated this rule and declared, "My people shall never be unanimous in an errot," which has a full support of the Quran.

G. MAIN PROBLEM

At present Islamic Law, with the exception of personal laws, is isolated from justice in the courts, and law of the country is occupied by the foreign laws. No body cares to study Shariah in a scientific way since there is no need for it in the official and administrative matters. Moreover it is not recognised as an intellectual discipline in our universities until very recently. So without the active dialogue of universities, it, as an intellectual discipline, deteriorated into ideology—the rational defence of position adopted on non-rational grounds. It became a matter of subjective feelings, restricted to intellectual dimensions and to matters of denominational apologies.

Our forefathers had fought to get rid of the yoke of imperialism. This is our duty to get rid of this legal servitude to the West. Nothing is more harmful than intellectual imperialism and a legal servitude to any other nation. Moreover every nation has its own which its citizens recognise, respect, and consider as a base on which nation is to be built. It is not wise for a nation to borrow that base from another nation, the tradition, history and religion of which are different from its own.

However, the Shariah has passed through a phase of stagnation. This also cannot be realised in a short time. Reasonable time is required to get out of this situation and to start on the way of progress. Constant hard work is required to develop Islamic law in such a way as to make it possible to drive from it a law which suits our time and which frees us from the curse of imitation of the West.

H. CONTEMPORARY NEEDS

The character of a formal legal system is mainly influenced and governed by informal normative relations in the social order of which the legal system is a part. Community affairs influence law and its administration. Similarly the form and content of legal institutions are shaped by the social, political economic and religious forces which constitute the life of the community. So there is a need for reshaping our existing research methodology, so that to recognise the contemporary requirements of our changing society, by keeping an healthy balance between traditional orthodoxy and revolutionary contents of the Quran.

I. ISLAMIC RESEARCH INSTITUTE AND THE SHARIAH FACULTY

Although Islamic Research Institute has made encouraging but sporadic efforts to enlarge the scope of its research beyond traditional legal compilations and commentaries, it still remains poorly organised for going beyond formal and conventional legal doctrines. There is a need to epitomize unauthoritative limitations imposed on research efforts. In our contemporary circumstances, a need for more efficient methods for research and reliable and understandable explanations has increased greately.

In view of these consideration, faculty of Shariah has been establish in the Quaid-i-Azam University; to prove that Islam has everything to make us dispense with the Western legal system.

Main difficulty in the way of achieving the goal for the Faculty is the severe shortage of qualified teachers who could really prepare curricular materials which are not slanted toward the convictions of one particular school of thought. And who could avoid religious controversies. Even when a teacher is not obviously inculcating or espousing one school of thought, he may still be teaching about another school from a perspective alien to one school and hospitable to another. One may wonder whether this can ever be avoided. Yet it can be; provided a teacher is properly equipped and ready to do so.

The Faculty should make arrangements for the translation and publication of all the origins of Shariah. Other books dealing with legislation should also be published. It should not stick to any one school of thought or four schools

of thought, but other schools such as Zaydia, Imamiya and Zahiriya schools of law should also be deeply studied. For all schools contain treasures of legislation, ought to benefit us in our legal and social renaissance. The students should be throughly involved to study all these origins.

When the students know every thing about Shariah of all the schools, they should be lead to move forward in their intensive studies to assimilation, formation and specification, on a completely new unconventional lines, different from those used in our traditional institutions. They should be prepared to compare our laws and legal system with other contemporary laws and legal systems of the world.

They should fight against regidity in Shariah. For regidity is the main cause of stagnation. Rigidity means death; and should find out solution to new problems such as concerning stock exchange, the cotton market, contracting agricultural produce, the working of co-operative societies, like giving loans to farmers; and concerning economy and finance, insurance companies, international credit, and banking system etc.

J. THE EARLIER LEGAL PROPOSALS

The views of the earlier jurists are entitled to the utmost respect. They, however, are not autonomous or final authority. They are legal proposals supported by reason. They show us that during that period legal research was greately advanced in technical sophestication and in conceptual creativity both. We also observe in the earlier jurists a quest for legal generality and certainty, and lasting zeal to understand law. The jurists, at the time of legislation had fully utilised the sources and principles of Islamic law, to find a eight solution for the problems confronting them. Their opinions remain, while things and circumstances have changed rapidly. Now we are facing many problems that could not by any means have existed in their times. We should not sit with our hands tied, saying that our jurists have not given a ruling for this problem or that.

CONCLUSION

At present Islam lacks a centre where scattered reasoning could be examined, principles and theories could be redefined and refined to meet the contemporary needs of the scientific age, and binding rules could be derived and issued by consensus.

A society that fails to dopt its theories to the changing circumstances, ceases to evolve. By doing so, it dooms not only itself to stagnation and decline, but also very theories that brought about this stage of affairs, to disrepute and eventually oblivion.

ADDITIONAL READING LIST

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HEALTH IN ISLAM

Health science is a part of medical science which has laws, regulations that the people must know to be healthy based upon observations, research and experiences which have been done for a long time. All these laws and regulations have not come at once into being but they have been changed many times, replaced and perfected. This health science is made by man.

Formerly there was the opinion that some one was called healthy when he had no disease, but it was only thought about the body and he felt healthy when he could eat much until he became obese.

At present WHO (World Health Organisation) defines health as : " Health is a state of complete physical, mental and social wellbeing, not merely the absence of disease or infirmity ."

We can say freely that anyone is called healthy when he has a physical body which has no disease, has a good nutrition, mental, spirit that is relaxed, not restless and has a good social position, he can earn his living and possesses a house which gives him shelter and is respected as a human being.

It is something that is very idealistic which has to be reached not only by the individual himself but also by society and the government concerned.

This is all the result of science, the result of human thinking.

What is a healthy life for?

Science cannot answer this question, may be it can say that man has to live a healthy life in order to get pleasure, luck and to be useful for the society to obtain peace and so on.

Dienul Islam is a Religion sent by GOD *via* HIS prophets which brought laws and regulations which are to be obeyed by Muslims.

These regulations, and guidance are sufficient and not changed and are perfect. Islamic teachings cover all aspects of life of man in this world, including health. We surely, remember the saying of our Prophet Muhammad s.a.w. which regards health :

" Do fast and you will be healthy ". صوموا تصحوا

Islam regulates health and determines the reason for what we have to live healthy and explains the goal of life in this world. Let us recite several verses for several fields :

1. The goal of man's life in the world explains the verse 56 of Surah adz-Dzariyat :

   " And I have not created the jin and the men but that they may worship me." وما خلقت الجن والانس الا ليعبدون

Here the Word : " ليعبدون "

is interpreted with " to submit himself to HIS Will " and from this is the word *ibadah* coming which means to do all His commands and to avoid all HIS prohibitions, clearly defined : to do all Allah's Commands and to avoid all HIS prohibitions is IBADAH.

2. The second aim is to do good deeds as stated in the verse 3 of Surah al-Mulk :

" He Who has created death and life that might try you which of you is best in deeds ; and HE is the Mighty, the Most Forgiving. "	الذى خلق الموت والحياة ليبلوكم ايكم احسن عملا و هوالعزيز الغفور

3. God explains that life in this world is not easy, full of obstacles, sufferings and temptations, especially to meet Allah. Let us hear some words of God about it :

   a. Surah al-Balad verse 5 :

" We have surely, created man to toil and struggle ."	لقد خلقنا الانسان فى كبد .

   b. Surah al-Inshiqaq verse 7 :

" Verily, thou, O man, art toiling along towards thy Lord, a hard toiling ; until thou meet HIM ."	يا ايها الانسان انك كادح الى ربك كدحا فملاقيه .

   c. Surah al-Anbiya verse 36 :

" Every soul shall taste of death ; and we test you with evil and good by away of trial. And to US shall you be returned ."	كل نفس ذائقة الموت ونبلوكم بالشر والخير فتنة والينا ترجعون .

   d. Surah Ali Imran verse 187 :

" You shall, surely, be tried in your possessions and in your persons. . . . . "	لتبلون فى اموالكم وانفسكم .

It is clear that the goal of man's life in this world is to submit himself to HIS Will and to do good deeds in this life which is full of—difficulties, temptations, and sufferings. For this he has to be healthy, to protect and to develop his health so that he can meet his Lord with victory.

He must be physically healthy to do good deeds as well as possible and as many as possible, psychologically healthy, because he has to overcome all temptations and socially healthy which means to have a good economic position and shelter.

How can he perform his prayers when he is always sick, do his fasting when his body is not strong, to perform the haj when his body is not healthy and is not able to earn money for the cost of haj.

Let us start to discuss how Islam regulates health.

1. Physical Health

Cleanliness is the base of health and the principle tool is WATER. This is the slogan of the medical science to reach health. With water all dirt can be cleaned, from the body, clothes, house, plates, and so on and water is the best tool for it.

As about this cleanliness Ilmu Fiqh has a special chapter named BABUTH THAHARAH which means cleanliness. Let us hear the sayings of Allah and the Hadits of Prophet Muhammad s.a.w. as follows :

a. Surah at-Taubah verse 108 :

"and ALLAH loves those who purify himself."

والله يحب المطهرين

b. Surah al-Muddatstsir verse 5 :

" and thy clothes do thou purify."

وثيابك فاطهر

c. Prophet Muhammad s.a.w. said :

" Verily Allah the Highest good and loves all what is good, clean and loves cleanliness honourable and loves honour, generous and loves generosity, so clean your yard (Tirmidzi from Sa'ad) ".

ان الله تعالى طيب يحب الطيبات نظيف يحب النظافة كريم يحب الكرم جواد يحب الجود فنظفوا افنيتكم .

d. Prophet Muhammad s.a.w. said :

" Jabir bin Abdullah told that Muhammad s.a.w. came to us and saw a man whose hair was entangled and said whether this man has something to comb his hair with and he saw another man whose clothes were dirty and said whether this man has something to wash his clothes with (Abu Daud)."

عن جابر بن عبدالله قال اتانا رسول الله صلى الله عليه وسلم وراى رجلا شعثا قد تفرق شعره فقال اما كان يجد هذا ما يسكن به شعره وراى اخرا عليه ثياب وسخة فقال اما كان هذا يجد ما يغسل به ثوابه

Islam has told that water is the principle tool for cleanliness long before medical science started to develop, as written in Surah al-Anfal verse 12 :

" And HE sent down water upon you from the clouds, that hereby He might purify you."

وينزل عليكم من السماء ماء ليطهركم به

Viewed from medical science water from the clouds (rain water) is the best water which does not harbour bacteria and this water is very pure.

With this water Islam obliges its ummah to clean slight hadats (urine, faces, blood and sputum) and heavy hadats which means bathing after coitus, after menstruation and after wet dreams, especially for the youth and widows.

Surely we still remember the story in the Mi'raj, when Prophet Muhammad s.a.w. was passing a grave he heard a cry and he asked Gibrail what kind of cry it was and got the answer that it was the cry of those who did'nt wash his urine.

It means that cleanliness belongs to ibadah. We dare to say that thus Islam obliges its ummah to use water much so that it is obliged to make a study about water accurately about which water we can use for cleansing slight hadats, wudlu' and heavy hadats. Used water is not valid to clean urine.

Also Islam is the only one which obliges its ummah to use water for cleansing.

The non-Muslims instead of water use paper to clean their urine and feaces and this is not obliged. When we go anywhere in this world and go into the lavatory in hotels, ships or places we do not find water, but they present only paper.

Clearly, seen from the side of cleanliness, really the Muslims are the cleanest people in the world but unfortunately our ummah do not yet execute this learning of cleanliness. Maybe, we have not been clearly taught yet what kind of water which is required to clean slight and heavy hadats, and maybe also because the law of Fiqh has stated that water when it is 2 kulahs or more (20 liters) though its color and smell have changed can be used for hadats. That is why the Indonesian Muslims in the metropolitan City or in the villages still use water from the river which is not clean, because they urinate and loose their feaces in it, though Indonesia it self is surrounded by water and has many rivers and wells with clean water.

Seen from the medical side it is obvious that the river water which drags all kinds of dirt can have violent bacteria which can cause many sorts of diseases like dysenteria, typus, even cholera.

The use of water by ummah as we now see in mosques and the rivers has to be reviewed, especially from the standpoint of Islam which teaches its ummah to be clean and healthy.

Islam teaches us to urinate and loose feaces in a closed place. As to lavatory as a source of diseases, our ummah especially in the villages do not know and understand that to make a good lavatory is also an ibadah. Many of our ummah still throw away their dirt in the back yard or in the open rivers.

Wudlu' which starts with istinja' (urination) is a healthy activity which has no equality and is unique. Every time we perform our wudlu' we clean our body from urine and other dirt, our hands which have touched many places and things,

are washed with water, we gargle to purify our mouth, head, both hands and legs which have walked over many places which less or more have dirt and bacteria.

For the sake of cleanliness and health, a Muslim really must make a lavatory and bathroom in the house and let clean water come into it.

To protect the health of the body, Islam obliges at least to cover a certain part of the body which is called "aurat" and regulates how to dress.

Clothes must be purified from dirts and najis. Physical body needs water and food to get a healthy life. Water is needed not only from the medical view but especially from the saying of Allah who said in the verse 31 of Surah al-Anbiya' :

> "And we made of water every living thing. Will they not then believe?"
>
> وجعلنا من الماء كل شيء حي ـ

Islam teaches us that water is the principle thing to drink as Allah said in the verse 10 of Surah an-Nahl :

> "He it is Who sends down water for you from the clouds ; out of it you have your drink ."
>
> هو الذى انزل من السماء ماء لكم منه شراب ـ

The Lord teaches us how to drink as He said in the verse 31 Surah al-A'raf :

> " And eat and drink, but be not immoderate ; surely, He does not love those who are immoderate ."
>
> كلوا و اشربوا و لا تسرفوا ان الله لا يحب المسرفين ـ

How to drink must be correctly, draught by draught, not at once, because it disturbs the air passage we will choke, not too much because it can cause water intoxication. Islam forbids to drink anything which can reduce consciousness like spirits which makes one drunk among others alcohol as Allah said in the verse 220 Surah al-Baqarah :

> " They ask thee concerning wine and games of chance. Say, in both there is great sin and harm also some advantages for men ; but their sin and harm are greater than their advantages. . . ."
>
> يسئلونك عن الخمر والميسر قل فيهما اثم كبير و منافع للناس واثمهما اكبر من نفعهما ـ

Medical science has proven that alcohol how small a quantity it may be can destroy the brain which is the source of consciousness though when it is seen from the standpoint of nutrition it has a high value. In Western countries alcohol is one of the causes of traffic accidents. Surely, only water is needed for life not coffee, alcohol or other drinks.

Physical body needs food for energy, power to live. For this Allah provides it in forms of flora and fauna, but Allah regulates food materials which may be eaten and which may not be eaten. Man and science have determined which food is good and which is not good. Whether it is based upon natural experiences or scientific experiences.

Man shall not eat rat, snake, snail and worm or tiger and bear. But is allowed to eat them when there is an emergency like famine, lack of food caused by war or disaster.

Let us recite some verses in the Holy Quran concerning this food :

1. Surah al-Maidah verse 3 :

"Forbidden to you cadaver, and blood and the flesh of swine ; and that on which is invoked the name of any other than Allah ; and that which has been strangled ; and that which has been beaten to death ; and that which has been killed by a fall ; and that which has been gored to death ; and that of which a wild animal has eaten, except that which you have properly slaughtered ."

حرمت عايكم و الميتة والدم ولحم الخنزير وما اهل لغير الله به والمنخنقة والموقوذة والنطيحة وما اكل السبع الا ماذكيتم وما ذبح على النصب ـ

2. Surah an-Nahl verse 15 concerning sea-food :

" And He is it Who has subjected to you the sea that you may eat therefrom fresh flesh ."

وهو الذى سخر البحر لتا كلوامنه لحما طريا ـ

3. Surah an-Nahl verse 115 :

" He has made unlawful for you only that which dies of itself and blood and flesh of swine and that on which the name of no other than Allah has been invoked. But he who is driven by necessity to eat any of these things, being neither disobedient not exceeding the limit, then, surely, Allah is Most Forgiving, Merciful ."

انما حدم عايكم و الميتة والدم ولحم الخنزير وما اهل لغير الله به فمن الطر غير باغ ولا عاد فان الله غفور رحيم ـ

4. Surah an-Nahl verse 116, concerning lawful food and good :

" So eat the law full and good things which Allah has provided for you, and be grateful tor the bounty of Allah, if it is Him you worship ."

فكلوا مما رزقكم الله حلالا طيبا واشكروا نعمة الله ان كنتم اياه تعبدون ـ

Clearly, Islam teaches its ummah to eat things that Allah has provided to it which is lawful and good and after that to be grateful for that bounty.

Islam regulates so that man does not eat and gratuitously and subjected to his desire, and his taste. Surely, man has considered that those who has eaten much is those who is healthy and fat body is the dream of every one. Now there is evidence that eating too much than is needed is dangerous for the health and can even cause many diseases. The body will change the food that is eaten into fat which is stored in the chest and stomach so that he becomes fat, obese and fat is also laid down in the wall of blood vessels so that they become narrow, a heavy body will burden the heart. The narrowed vessels will disturb the blood circulation in the body and into the organs so that the functions of the organs are also disordered, and all this can cause renal diseases, hyper tension, brain stroke and diabetes mellitus.

Allah and his Prophet have regulated the way of good eating which has proven to be according to the fisiology of eating. Allah said in the surah al-A'raf verse 31 :

> " And eat and drink, but be not immoderate surely, He does not love those who are immoderate:"
>
> كلوا واشربوا ولا تسرفوا ان الله لا يحب المسرفين .

Muhammad s.a.w. said:

> " We are people who will not eat unless we are hungry and when we eat we are not satiated."
>
> نحن قوم لا ناكل حتى نجوع واذا اكلنا لا نشبع .

Before we start eating we say : " Bismillahirrahmanirrahim " and when we have finished eating we say ; " Alhamdulillahi Rabbil Alamien " as an expression of gratefulness to Allah.

Nightly sleep belongs to the needs of physical body and Allah created the night for rest, not for staying up.

Let us listen to the saying of Allah ;

1. Surah Yunus verse 67 :

   " He is WHO has made for your the night dark that you may rest therein."

   هو الذى جعل لكم الليل لتسكنوا فيه .

2. Surah al-Qashshash verse 73 ;

   " And of His mercy He has made for you the night and the day, that you may rest therein and that you may seek of His bounty, and that you may be grateful."

   ومن رحمته جعل لكم الليل والنهار لتسكنوا فيه ولتبتغوا من فضله ولعلكم تشكرون .

Circumcision for males is now evident as having activities for cleanlines and against cancer and for the husbands against virus transmission to the uterus of his wife.

We have seen how Allah and His Prophet have taught His ummah to be puri fied and regulate food drink and sleep to get health which is needed very much for submission to His will and to do good deeds as many as possible for the mankind.

2. Mental Health

What the soul is science is not able to reveal it that justifies what.

Allah said in surah al-Isra' verse 85 :

" And they ask thee concerning the soul. Say the soul has been created by the command of my Lord ; and of the knowledge there of you have been given but a little."	يسلونک عن الدوح قل الدوح ن امر ربى وما آوتيتم من العلم لا قليلا

Psychology is originally the knowledge of human psyche, soul and now to b defined as the knowledge of normal human behavior and psychiatry is originall the knowledge of sick or disordered psyche, soul, now is a part of the medica Seince for study and treatment of deviant human behavior. It means that we canse the condition of the soul whether healthy or not healthy in the behavior, the wa he talks, walks and so on.

A man is called psychologically healthy when he behaves normally and i called psychotic when he behaves abnormally, even when he is crazy.

Formerly it was said that a healthy soul is in a healthy body (mens sana i corpora sano). It is obvious that this slogan is not fully true, because a mentall retarded person can have a healthy body.

Because man does not surely know what the soul is, there are so many name for the same meaning like in the Indonesian language : " jiwa, ruh, and sukma."

In medical language itself you have several words which are used for the sam thing ; they are : psyche, mental, spirit.

There are psychitrists who can not accept the word mental disorder becaus the brain is in close contact with the soul and brain damage can also show a abnormal behavior, it means that there is mental disorder and they incline to us the word " brain discorder."

A healthy soul is a soul which can overcome all disturbances, because ma is really, always in a state of anxiety, being afraid of death of being robbed, c losing all his wealth, being uneasy because he is not able to fulfill all the needs c his life such as food, drink and more of his sexual life.

Let us recite some verses regarding the human behavior and the difficulties that always trouble him.

Has to human behavior Allah explains in the surah al-Ma'arij verse 19—35 :

1. " Verily, man is created impatient and in misery." (19).	ان الانسان خلق هلوعاً
2. " When evil touches him, he is full of lamentations." (20).	اذا مسه الشر جزوعاً
3. " But when good falls to his lot, he is neggardly." (21).	واذا مسه الخير منوعاً
4. " Except those who pray." (22).	الا المصلون
5. " Those who are constant in their prayer." (23).	الذين هم على صلاتهم دائمون
6. " And those in whose wealth there is a known right." (24).	والذين في اموالهم حق معلوم
7. " For those who ask for help and those who do not ask." (25).	للسائل والمحروم
8. " And those who believe in the Day of Judgement to become a reality." (26).	والذين يصدقون بيوم الدين
9. " And those who are fearful of the punishment of their Lord." (27).	والذين هم من عذاب ربهم مشفقون
10. " Verily, from the punishment of their Lord none can feel secure." (28).	ان عذاب ربهم غير مامون
11. " And those who guard their private parts." (29).	والذين هم لفروجهم حافظون
12. " Except from their wives and from those whom their right hands possess ; such, indeed, are not to blame." (30).	الا على ازواجهم او ما ملكت ايمانهم فانهم غير ملومين .
13. " But those who seek to go beyond that, it is these who are transgressors." (31).	فمن ابتغى وراء ذلك فاولئك هم العادون
14. " And those who are watchful of their trusts and their covenants." (32).	والذين هم لاماناتهم وعهدهم راعون

15. " And those who are upright in their testimonies." (33).	والذين هم بشهاد تهم قائمون
16. " And those who are strict in the observance of their prayer." (34).	والذين هم على صلاتهم يحافظون
17. " These will be in the Gardens, duly honoured." (35).	أولئك في جنت مكرمون

From these verses above, Allah has explained that those who will not be uneasy in their lives which are full of temptation, sufferings and difficulties, are :

1. those who always perform their prayers.
2. those who give a part of their wealth to those who need them, namely the poor, orphans and for social activities and so on.
3. those who believe in the Day of Judgement for good deeds and bad deeds which they have done in this world.
4. those who can not feel secure from the punishment of Lord, because they are not sure that they are always doing right ways, now and then surely they have made mistakes which they themselves did not know.
5. those who have been keeping their honesty in the field of sexual life, they do not commit adultery.
6. those who watch their trusts and keep their promises.
7. those who are honest in their witness, do not like to lie though they are threathened.

Surely when we can fulfil all the above conditions, obviously we will not live in anxiety because one of the causes of anxiety is feeling guilty. Being Muslims we will be restless when we neglect our prayers, because prayers are obligated, when we possess a certainly of faith that once upon a time we will be before Allah to justify ourselves for what we have done, surely we will obey all of HIS Commands and avoid all of HIS prohibitions, pay the zakat from what Allah has provided, we will not draw near and not commit adultery, we will not lie and defend the truth.

The restlesness of the soul causes palpitation, sleeplesness and no appetite, some times transpiration, feeling of anxiety and a feeling of pressure in the chest that all can make a man easily get angry or easily cry. When we consult a psychiatrist he will try to look for the cause of this anxiety and try together with us to search for a solution and it will take a long time.

For the time being the psychiatrist will give us some drug as tranquillizer, hypnotic or sedative which are now in a great number. Often psychiatrist and patient do not know exactly the cause and we will visit him many times to obtain

ore drug. Science will not advise the patient to pray to Allah, because until oday many doctors even among the Muslims say that science and Islam are two eparate things and both have no relation at all, while we, Muslims believe that cience is a part of Islam and that we can understand Islam better with science as hat Einstein said that "*Science without religion is blind, and Religion without cience is lame.*"

When the soul is restless Allah let us remember HIM, because the rememberance of Allah will calm us down.

Let us recite some verses how to calm down the soul which is restless.

1. Surah ar-Ra'du verse 28 ;

"Those who believe and whose hearts find comfort in the remembrance of Allah Aye : It is the remembrance of Allah that hearts can find comfort".

الذين امنو وتطمئن قلوبهم بذكر الله الا بذكر الله تطمئن القلوب

2. Surah al-Fath verse 4 ;

"He it is who sent down tranquillity into the hearts of the believers that they might add faith to their faith and to Allah belong the hosts of the heavens and the earth and Allah is All-Kowing, Wise".

هوالذى انزل السكينة فى قلوب المؤمنين ليزدادوا ايمانا مع ايمانهم .

So there are so many facturs which make the heart become restless among others :

A. The Fear for Death.

As to death Allah explains in the surah Ali Imran verse 145 ;

"And O soul can die except by Allah's leave a decree with a fixed term".

ماكان لنفس ان تموت الا باذن الله كتابا موجلا .

B. *The Fear of No Having to Eat.*

Allah guarantees food for anyone or anything which lives in this world or on this earth when he will try to look for it, as Allah said in ;

1. The surah Hud verse ;

"And there is no creature that moves on the earth but it is for Allah to provide it with sustenance. And He knows its place of temporary sojourn and its permanent dwelling all this is recorded in a clear Book".

وما من دابة فى الارض الا على الله رزقها ويعلم مستقرها و مستودعها كل فى كتاب مبين .

2. The surah al-Ankabut verse 60 :

" And how many an animal there is that carries not its sustenance ! Allah provides for it and for you. And He is the All-Hearing, the All-Knowing."

وكاين من دابه لا تحمل رزقها الله يرزقها واياكم وهو السميع العليم .

3. The surah al-Ankabut verse 62 ;

" Allah enlarges the means of sustenance for such of His servants as He pleases and straightens them for whom He pleases. Surely, Allah has full Knowledge of all things "

الله يبسط الرزق لمن يشاء من عباده ويقدر له ان الله بكل شيئ عليم

The believer will not be restless for this because the worldly gift is and to whom He will give it more determined by Him, as He explains it in the surah an-Nahl verse 71 :

" And Allah has favoured some of you above others in worldly gifts. But those more favoured will not restore any part of their right hands possess so that they may be equal sharers in them. Knowing this, will they still deny the favour of Allah? "

والله فضل بعضكم على بعض في الرزق فما الذين فضلوا برادى رزقهم على ما ملكت ايمانهم فهم فيه سواء فبنعمة الله يجحدون .

C. *Fear for Disease* :

Anything like disease, which affects a Muslim has a special function in the side of Allah as our Prophet Muhammad s.a.w. said :

" Anything that affects a Muslim even a thorn or more, happens because one of two reasons, because Allah will forgive him from his sins which cannot be forgiven but with this sample or because He will pass with it honour which. He cannot pass but with this sample."

(Rawi Ibnu Abi Dunia).

ما اصاب رجلا من المسلمين نكبة فما فوقها حتى الشوكة الا لاحدى خصلتين اما ليغفر الله من الذنوب ذنبا لم يكن ليغفر له الا بمثل ذلك او يبلغ به من الكرامة لم يكن يبلغها الا بمثل ذلك

رواه ابن ابى الدنيا

Man can be affected by severe diseases like cancer, diabetes mellitus, hypertension, which we or doctors often do not know from which they have come. As a Muslim we can only say that every thing has been determined by Allah before.

In this way we will bear any disease patiently without complaints and we will be closer to Allah by praying in strengthening our patience and our belief.

D. *Fear for Calamity* :

As regards the calamity Allah explains in the Holy Qur'an in :

1. Surah al-Hadid verse 22 :

" There befalls not any calamity either in the earth or in your own persons, but it is recorded in a BOOK before. We bring it into being-surely, that is easy for Allah."

ما اصاب من مصيبة في الارض
ولا في انفسكم الا في كتاب من قبل
ان نبرأها ان ذالك على الله يسير

2. Surah at-Taghabun verse 11 :

" There befalls not any affliction but by the leave of Allah. And whoever believes in Allah. He guides his heart aright. And Allah knows all things well."

ما اصاب من مصيبة الا باذن الله
و من يومن بالله يهدي قلبه والله
بكل شيء عليم -

The best therapy for facing these various calamities and sufferings is patience, which means accepting this suffering with all calmness and thinking about the causes of them and trying to overcame and to avoid them, as Allah explains in :

1. Surah al-Baqarah verse 155-156 :

" And we will try you with something of fear and hunger, and loss of wealth and lives and fruits but give glad tidings to those who patiently persevere."

ولنبلونكم بشيء من الخوف والجوع
ونقص من الاموال والانفس والثمرات
وبشر الصابرين -

" Who when a misfortune overtakes them, say " Surely, to Allah we belong and to HIM shall we return."

الذين اذا اصابتهم مصيبة قالوا
انالله وانا اليه راجعون -

2. Surah Luqman verse 17 :

" O, my dear son, observe Prayer and enjoin good and forbid evil and endure patiently whatever may befall thee. Surely, this is of those matters which require high resolve."

يبني اقم الصلاة وامر بالمعروف
وانه عن المنكر واصبر على ما اصابك
ان ذلك من عزم الامور-

Patience (Sabar) does not mean to be apathetic, but to eliminate emotion, to cool off the head, to suppress the side effect of emotion and fear which can destruct heart, and cause bleeding in the brain.

1 Science does not know which factors cause restlessness, but Allah explains in some of HIS revelations that Satan and man (himself) are the most important factors for restlessness.

1. Surah an-Nas verse 4 :

" From the evil whisperings of the sneaking whisperer ". Verse 5 :

من شر الوسواس الخناس .

" Who whispers into the hearts of man." Verse 6 ;

الذي يوسوس في صدور الناس .

" From among jin and man."

من الجنة والناس .

2. Surah al-Fathir (35) verse 6 :

" Surely, Satan is an enemy to you ; so treat him as an enemy. He calls his followers only that they may become inmates of the burning fire."

ان الشيطان لكم عدو فاتخذوه عدوا انما يدعو حذبه ليكونوا من اصحاب السعير .

3. Surah al-Isra ' (17) verse 53 :

" And say to My servants that they should always speak which is best. Surely, Satan stirs up discord among them. Surely, Satan is an open enemy to man."

وقل لعبادى يقولوا التى هى احسن ان الشيطان ينزغ بينهم ان الشيطان كان لانسان عدوا مبينا

E. Man himself, wealth, wife and his children can be his enemies and threat which disturb the peace of mind, as Allah explains in some of HIS revelations :

a. Factor of man, Himself, his lust in :

Surah Yusuf (12) verse 53 :

" And I do not hold my own self to be free from weakness—surely the soul is prone to enjoin evil—save that whereon my Lord has mercy. Surely, my Lord is Most Forgiving, Merciful."

وما ابرى نفسى ان النفس لا مارة بالسوء الا ما رحم ربى ان ربى غفور رحيم .

b. Factor of wife and children whom we love can make us restless as stated in the surah at-Taghabun verse 14 :

" O ye who believe ; Surely, among your wives and your children are some who are your enemies, so beware of them.

ياايهاالذين امنوا ان من ازوجكم واولادكم عدوالكم فاحذروهم وان تعفوا وتصفحوا وتغفروا فان الله غفور رحيم .

And if you overlook and forgive and pardon, then, surely, Allah is Most Forgiving, ever Merciful."

c. Wealth and children can also be a trial as Allah explains in surah al-Anfal (8) verse 28 :

" And know that your possessions and your children are but a trial and that it is Allah with Whom is a great reward."

واعلموا انما اموالكم واولادكم فتنة والله عنده اجر عظيم .

d. Men or friends can also be a trial stated in surah al-Furqan (25) verse 20 :

" And We make some of you a trial for others to. See whether you are steadfast. And thy Lord is All-Seeing."

وجعلنا بعضكم لبعض فتنة اتصبرون وكان ربك بصيرا .

e. Good and bad can disturb the peace of mind as stated in surah al-Anbiya' verse 35 :

" Every soul shall taste death ; and We test you with evil and good by way of trial. And to Us shall you be returned."

كل نفس ذائقة الموت ونبلوكم بالشر والخير فتنة والينا ترجعون .

Clearly that he who believes shall not suffer from a disturbed soul ; and complete mental health can be achieved with Islam, in accordance with the revealation of Allah that Islam has been sent down to be handhold of life and the principal sedativum as stated in surah Yunus verse 57 :

" O, mankind there indeed has come to you an Exhortation from your Lord and a healing for whatever disease there is in the hearts and a guidance and a mercy to the believers."

ياايهاالناس قد جاءتكم موعظة من ربكم وشفاء لما في الصدور وهدى ورحمة للمومنين .

Social Well-Being

The third criterium which has been formulated by W.H.O. to determine the health of some one is " Complete Social well-being " which can mean a social condition which is good and perfect.

The way to reach this good condition has not been explained clearly by W.H.O., but we can look for in the Islam the meaning and how to reach the good perfect condition mentioned above.

Any one can have a good social condition when he ;

a. Is appreciated, independent from his social status, like Allah appre tes him, as mentioned in the surah al-Isra '(17) verse 70 :

" Indeed, We have honoured the children of Adam, and We carry them with good things and have exalted the far above many of those whom We have created."	. كرمنا بني آدم و حملنا هم البر و البحر ورزقناهم من يبات وفضلنا هم على كثير ممن نا تفضيلاً .

b. Has a job for his life.

c. Has a house for shelter.

d. Has a wife (married life).

Prophet Muhammad s.a.w. proposed in his saying :

" Marriage is my way of life. He who does not marry, he does not belong to me, and marry, so I am proud of your majority to other people ".	كاح من سنتي فمن لم يعمل بسنتي س مني وتزوجوا فاني مكاثربكم - م

A Friend of Prophet Muhammad s.a.w. Abdullah ibn Mas'ud thought :

" If the end of my life is only 10 days left I should still like to marry so that I shall not meet Allah single."	م يبق من عمري الا عشرة م لا حببت ان اتزوج لان لا ى الله عذباً .

Allah said in surat ar-Rum (30) verse 21 :

" And of His Signs is that He has created wives for you from among yourselves that you may find peace of mind in them, and He has put love and tenderness between you. In that surely, are Signs for a people who reflect."	ن اياته ان خلق لكم من انفسكم زاجا لتسكنوا اليها وجعل بينكم لاة ورحمة ان في ذالك لايات م يتفكرون.

To reach it, all of us has to work hard, but in any society in the world s their is differenc like the strong and the weak ; the successful ones and the failur the rich and the poor, the employed and the unemployed, the healthy ones and t sick, the young and the old and so on. It should be attempted so that each p of life gets good healthy condition and this can only be reached when the socie cooperates to create " sound living together."

We *see* in reality that some one who works hard every day, but he does not succeed get earning which he needs and we *see* that some one seemingly does not work at all, but he gets more than he needs. Non believers can easily say that Allah is not just, but we Muslims who believe, knows and are convinced that :

a. Allah creates all on this earth in order to complete man's life, in accordance with his Firman in the surah al-A'raf verse 10 :

" And we have established you in the earth and provided for you herein the means of subsistence but little thanks do thu give."

ولقد مكنا كم فى الارض وجعلنا
لكم فيها معايش قليلا ما تشكرون ـ

b. Allah sends down His Gifts to anyone and determines as stated in surah ar-Ra'du verse 27 :

" Allah enlarges His Provision and straighttens it for whomsoever He pleases."

الله يبسط الرزق لمن يشاء ويقدر ـ

In surah al-Ankabut verse 62 :

" Allah enlarges the means of sustenance for such of His servants as He pleases and straighttens them for whom He pleases. Surely, Allah has full knowledge of All-Things."

ان الله يبسط الرزق لمن يشاء
من عباده ويقدرله ان الله بكل
شيئى عليم ـ

c. Allah gives more provision to some one more than the other as stated in surah an-Nahl verse 71 :

" And Allah has favoured some of you above others in worldly gifts."

والله فضل بعضكم على بعض فى
الرزق ـ

We *see* that although Allah has created all in this world for the life of mankind as " Khalifatullah ", but to make life living, there have been created different strata of society. That means if life should be beneficial for the mankind, they have to divide their provisions and functions.

Man shall not be restful and happy when he is not ready for cooperation and divide their havings with others. For this Allah has laid [illegible], provoked sadaqah, infaq, hibah and so on, as good deeds which will give him a happy life in Hereafter.

With this system it can be excepted that every one of us can have a good social status as condition for health life.

With this zakat-system the society participates in the creation of a healthy social life and the society shall not be healthy, restfull and happy when there are still among their members the poors.

Let us try to understand some verses in different surah concerning zakat, infaq and sadaqah :

1. Surah al-Baqarah verse 83 :

" And remember the time when We took a covenant from the Children of Israel ; " You shall worship none but Allah and be kind to parents and kindred and orphans and the poor, and speak to men kindly and observe Prayer and pay the zakat then you turned away in aversion, except a few of you."

واذ اخذ نا ميثاق بنى اسرائيل لا تعبدون الا الله وبالوالدين وذى القربى وايتماى والمساكين وقولو الناس حسنا واقيموا الصلا واتو الزكاة ثم توليم الا قليك منكم وانتم معرضون .

2. Surah at-Taubah verse 60 :

" The alms are only for the poor and the needy, and for those Employed in connection therewith and for those whose hearts are to reconciled, and for the freeing of slaves, and for those in debt, and for the cause of Allah, and for the wayfareran ordinance from Allah. And Allah is All-Knowing, Wise."

انما الصدقات للفقرء والمساكين والعاملين عليهاوالمولفة قلوبهم وفى الرقاب والغارمين و فى سبيل الله وابن السبيل فريضة من الله والله عليم حكيم .

3. Surah an-Nahl verse 71 :

" And Allah has favoured some of you above others in worldly gifts. But those whom their right hands possess so that they may be equal sharers in them. Knowing this, will thee still deny the favour of Allah."

والله فضل بعضكم على بعض فى الرزق فماالذى فضلوا ابرادى رزقهم على ماملكت ايمانهم فهم فيه سواء افبنعمة الله يجحدون .

4. Surah Ali Imran verse 14 :

" Fair-seeming to men is made the love of desired things-women and children, and store-up heaps of gold and silver, and horses of mark and cattle and crops. That is the provisions of the present life, but it is Allah with Whom is an excellent home."

زين للناس حب الشهوات من النساء والبنين والقناطير المقنطرة ومن الذهب والفضة والخيل المسومة و الانعام والحرث ذالك متاع الحياة الدنيا والله عنده حسن الماب

In order to create a healthy society, there should be developed mutual
each other, a great deed as a sign of belief which exists in the heart.

Prophet Muhammad s.a.w. said :

" Some one does not believe until he loves for his brother what he loves for himself."

احدكم حتى يحب لاخيه
ه لنفسه -

Here it is a very important education to grow mutual love at home, in
and in the society.

Zakat and infaq can be managed by the society itself but surely it should be
when it is managed and directed by the Government.

From the whole explanation concerning a perfect health which eve
shall possess namely :

Health is a state of complete physical, mental and social well-being, not me
absence of disease or infirmity, Islam has it directed in al-Quran and Had
is why Allah said in surah Saba ' verse 15, 16 and 17 :

" There was, indeed a Sign for Saba ' in their homeland-two gardens, one on the right hand and one on the left ; and We said to them : " Eat of the provision of your Lord and give thanks to Him. Your own is a beautiful town and your Lord Most Forgiving." (15).

ان لسبأ في مسكنهم اية
عن يمين و شمال كلوا من
بكم واشكروا له بلدة طيبة
فور -

" But they turned away ; so We sent against them a devastating flood. And We gave them in place of their excellent gardens, two gardens bearing bitter fruit and containing tamarisk and a few lotetrees." (16).

فارسلنا عليهم سيل العرم
هم بجنتيهم جنتين ذواتى
واثل وشئي من سدر قليل -

" Thus We requited them because of their ingratitude ; and it is *only the ungrateful that We* requite in this manner." (17).

جزينا هم بما كفروا وهل
الا الكفور -

Lastly let us thank Allah Who has sent Islam to the world *via* His P
Muhammad s.a.w. because only with His Direction, health and happiness
achieved.

All the human attempts as long as are not based on Islam, can not rea
goal namely HEALTH, because man is in nature egoistic, and miser.

Bismillah-hir Rahman-nir Rahim!

MUSLIM CHEMISTS AND THEIR CONTRIBUTIONS

Introduction

Once *A'of bin Malik*, may Allah the Almighty be pleased with him, fell sick. He took some honey, water and olive oil, mixed them all and drank Allah the Almighty healed him. When people asked him the reason why he preferred this mixture, he replied: "Allah the Almighty has spoken about the honey thus:

'.....there issues
From within the bodies
A drink of varying colours
Wherein is healing for men.'

—*(Al-Qur'an 16 : 69)*

"And about water, He has said:

'And We send down water
From the sky inherent
With blessing........'

—*(Al-Qur'an 23 : 18)*

"As for the olive oil is concerned, He has said:

'......Lit from a blessed. Tree,
An Olive, neither of the East
Nor of the West.
.................'

—*(Al-Qur'an 24 : 35)*

And the Prophet of Islam, peace be upon him, said:

"You must make the practice of two cures obligatory on you, the honey and the *Holy Qur'an*".

—*(Al-Hadith)*

Herein the Prophet (peace be upon him) has brought together healing through human efforts and healing by the Divine source thus amalgamating the medicinal cures for the corporeal and the spiritual ailments.

The Prophet of Islam (peace be upon him) is well-known for the cures he recommended to his ailing companions and they have gone to form volumes of texts namely *Tibb al-Nabvi* (The Prophet's Medicine) compiled by learned

ysicians like *Abu Naeem, Ibn Tarkhan, Dhahibi, Zahiri, Qartabi* and *Ibn Betar* and so forth. The Prophet (peace be upon him) is reported, in their collections, have prescribed cures for different ailments based on minerals and medicinal ants such as *Kalongi (Nigella Sativa), Methi* seeds *(Trigonella foenum—aecum), Neem (Azadirachta indica)* etc. In this connection *Compendium of edicinal Plants* [1] is a valuable dictionary outlining medicinal plants, their ligenous names in Pakistan, availability, cost and quantity, chemistry and armacology and glossary of rare plants as yet unexplored chemically. So the ophet of Islam (peace be upon him), who has been described repeatedly in e *Holy Qur'an* as a blessing to the believers and mercy [2] to all creatures, s been a spiritual as well as a physical healer, administering it all the time. kewise, Allah the Almighty has bestowed upon *Abu al-Abbas Bilya bin Ban alkan* alias *Khaizar* (peace be upon him), one of the living prophets with thority over the oceans and earth and a member of the *Ummah* of the Holy ophet of Islam (peace be upon him), amongst many qualities and learnings, e knowledge of chemistry and medicine, and being an exclusive tutor on e subjects he may please to endow intuitively anybody with such knowledge. ccordingly, the Muslim divines have been the fortunate beneficiaries, some of nose personal accounts and contributions we undertake to delineate. Incintally, it must be borne in mind that these divines have been at once druggists, emists and physicians as has been described at the outset that the Prophet of lam (peace be upon him) put his knowledge of the *Holy Qur'an*, herbs and inerals to the service of his suffering *Ummah* (the Muslim Nation). And this is all in addition to his inexplicable miraculous healing powers as an exalted ophet of Allah the Almighty.

So the early chemistry, alchemy, was studied for its practical usefulness in leviating the sufferings of mankind even though the inevitability of death was| will not be foreign to a Muslim as also to a non-Muslim. The story [4] has that before his death through consumption *Galen* (129|130—199|200 C.E.) nded over two tablets to his pupils and directed that after his death they ould place one tablet on an iron anvil and the other in a pitcher full of water. fulfilment to his wish, the pupils did what was desired of them. The anvil owed in a molten mass and the water froze breaking the pitcher. Thus monstrating that *Galen* as a chemist|physician could do the unbelieveable yet uld not escape death.

uslim Contribution to Science in General

Muslims maintained the Greeko-Byzantine quest for learning and during e period of the 9th and 14th century C.E., the heydays of Islamic literature, emendous progress was made in all fields of art and science. It was from 3 to 833 C.E. that the *Caliph* al-Mamun (d. 833 C.E.) set up *Dar-ul-Hikmah* e House of Wisdom) in Baghdad that attracted Muslim and non-Muslim

scholars from far and wide. Legend has it that *Aristotle's* ghost appeared before the Caliph who was hesitant to subject Universal phenomena to rationale, and assured him that there was 'no conflict between reason and religion' thus, consent for building and setting up of the centre was given. Another anecdote tells that the Caliph was chronically sick and, therefore, sought after physicians to cure his ailments. Be that as it may the Caliph is known to have collected at the conquest of the Byzantine and Persian empires and places as far afield as Constantinople and India some important Greek works of *Aristotle*, *Euclid*, *Ptolemy*, *Archintedes*, *Hippockraces*, *Dioscroides* and *Golen* and had them, rendered into Arabic at this centre. Muslim philosophers and scientists marvelled in their quest in such varied fields as medicine, chemistry, astronomy, mathematics, logic, metaphysics and even music and poetry between the ninth and fourteenth centuries C.E. that modern science had firm foundations laid, which were later rendered into Latin and utilised for the tremendous progress as is seen today. *Al-Razi* known in Europe as *Rhazes* (865—925 C.E), wrote some 200 books on both medicinal science and theology including twelve books of chemistry; the best known being *The Book of the Secret of Secrets* that outlined the composition of minerals. Nicknamed as the *Prince of Philosophers Ibn Sina* called *Avicenna* (980—1073 C.E.) authored some 170 books on philosophy, medicine, mathematics and astronomy including *Canon of Medicine*, an encyclopaedic achievement that dealt with treatment all round. He had memorised the *Holy Qur'an* by heart at the age of ten. *Al-Haitham* (d. 1039 C.E.) well-known by his Latin name *Al-Hazen*, a brilliant scholar of mathematics, applied it in the study of optics. He maintained that vision resulted from rays from an object which passed into the eyes and not *vice versa*.

Bernard Lewis ' writes :

> " Arabic medicine was in advance of European throughout the middle ages and from the first medical school of Solerno down to Vesalius. Western doctors learned from their Muslim counterparts ".

There is an important parallel between the scientific development at Baghdad and that at Cordoba in Muslim Spain. A century later to *al-Mamun*, a similar role was discharged by *al-Hukam* who began promoting the cause of science and philosophy in his country as a crown prince to the Caliphate of his father *Abd ar-Rahman III* (912—961 C.E.) and until his death in 976 C.E. he remained in search of books and gradually built a library which, it is said, almost equalled the great *Abbasid* collections in Baghdad. And people like *Yaqub Ibn Ishaq al-Kindi* (d. 870 C.E.), *Ibn Tufayl* or *Abu Bacer* (d. 1185 C.E.), the court physician of the *Almohed* ruler *Abu Yaqub* (1163—1184 C.E.), *Ibn Rushd* or *Averroes* (d. 1198 C.E.) who wrote in collaboration with *Abu Marwan Ibn Zuhr* or *Avenzoar* a comprehensive medical encyclopaedia consisting of his *Kulliyat* and *Ibn Zuhr's Taysir*, al-Farabi (d. 950 C.E. and *Ibn Bajja* or *Ayempace* (d. 1138 C.E.) flourished during 800 years of Muslim rule in Spain.

To name but a few, they contributed to the experimental sciences, characterised contagious ailments like tuberculosis, diagnosed symptoms of sickness and chronic diseases, performed complex operations for cranial, vascular and cancerous ailments and advanced in opthalmology as to remove the cataract of the eye. Pharmacies and hospitals, like those in vogue in Europe and the rest of the world today, served the afflicted in Baghdad and the rest of Byzantium and Persia. In 830 C.E. a great observatory was built in Baghdad which helped to discover stars and constellations named *Algol, Betelbense* and *Vega.* The most outstanding work on mathematics was *Hisab al-Jabr wal'l Muqabala* meaning 'the art of bringing together unknown to match a known quantity' by *Al-Khwarizmi* (d. 846 C.E.) who laid the foundation of modern Algebra, geometry and trigonometry. He knew the acceleration developed by falling bodies, distances between stars and the quantity of grain a granary would hold. Later *Astrolab*—also claimed to have been known to Greeks yet also disputedly attributed to *Jabir Ibn Haiyan*—was made use of by Muslim scientists to measure accurately the size of the earth, rotation around its axis, circumstance and diameter.

The most celebrated muslim scholar was *Ibn Khaldun* (d. 1406 C.E.) who wrote the famous *Muqaddimah* [7] (Prolegomena to the World History) thus laying the foundation of a new science, the philosophy of history, that took cognizance of the many factors that influence human events. This is taught at degree courses in many European universities.

The Prophet Muhammad [8] (peace be upon him : 572—632 C.E.)

The historiography of Islamic science begins with the Prophet of Islam (peace be upon him) whose prophethood in its finality and perfection brought in its wake the upsurge of art and science by Muslim scholars who have followed him since 16th July 622 C.E. when he migrated from *Makka Mukarrama* to *Madina Munawwara* and the lunar calendar began, till todate. He himself claimed :

> "I am the city of knowledge and Ali is the gateway to it".
>
> —*(Al-Hadith)*

The person who is conspicuously known for his inclination to science especially alchemy was *Khalid Ibn Yazid,* [9,10] a grandson of the first *Umayyad Caliph Mu'awiya* (661—680 C.E.). His works are surrounded by legends and enamoured by symbols. [11] After *Khalid,* comparatively authentic and extant works of *J'afar Ibn Muhammad as-Sadiq* (700—765 C.E.) command a great acknowledgement especially in the field of chemistry. *J'afar,* the descendant of the Prophet Muhammad (peace be upon him) was one of the earlier chemists and a contemporary of *Imam Abu Hanaifa* (founder of the Hanifite school of Muslim jurisprudence, d. 767 C.E.) and founded *J'afariyyah* school which is mainly followed by the *Shi-ite* division of Islam as opposed to the *Malkite* (founded by *Imam Malik,* d. 795 C.E.), *Hanbalite* (founded by *Imam Hanbal,*

d. 855 C.E.) and *Shafi-ite* (founded by Imam *Ash-Shafi*, d. 820 C.E.) schools, followed mainly by the *Suni-ites*. As will be observed in the account of *Jabir Ibn Haiyan* (cir 776 C.E.), *J'afar* handed over to his pupil, *Jabir*, the characteristics of objective experimentation rather than speculative theorising, hence accumulation of facts on the chemical operations of calcination, reduction and the commonly known physical processes.[13]

Syriac and Early Arabic Period

It has been through the pioneer efforts of Berthelot in the late nineteenth century[14] and other orientalists that the Arabian and Syriac alchemy of the middle ages in its vastness and richness have benefitted the West which has been responsible for the scientific progress as seen today. There has been a direct contact of the Syriac alchemists with the Greek chemical corpuses which were translated into Arabic as well as Latin and were promoted independently, unaware of each others' enterprise. Additionally, the Byzantine alchemical tradition came down to the Latin writers of the ages through the mediation of Arabic successors. The Syriac records are traced from ten books translated from *pseudo-Democritas* plus another one of a later date giving practical recipes and so also semi-mystical and magical fragments. And the early Arabic treatises include amongst many others the *Book of Crates*, the *Book of El-Habib*, the *Book of Ostanes the Wise* and the *Works of Jabir Ibn Haiyan* known by his Latin name as *Geber*. The books were all of special interest to French orientalists with mystical inclination and this was helped further by the proximity of Spain under Muslim rule as destined to be the meetng point for alchemy and the Spanish alchemists of the Calibre of *Ibn Rushd* (d. 1198 C.E.). The alchemy became popular among the zealous orientalists also for their understanding as to the possibility of transmutation of metals by Divine help and under the guidance of a master. After the preliminaries of praise to God Almighty, terminology and basic division of known substances the Syriac texts discuss in detail the preparation of gold by fixation of mercury with, for example, the body of magnesia, alum or arsenic, search for the *Philosopher's Stone*, preparation of sulphur, vinegar, elixirs of different kinds and so on, blending of colours, gilding of lead, treatment and fusion of lead and purification of copper alongside many of such processes.

The eleventh Syriac treatise in Arabic consists of some fifteen chapters describing mainly the utensils *i.e.*, apparatus, the fusion of lead, preparation of gold ink, sublimation of mercury, aureation of silver on glass and cinnabar, nomenclature of metals, description of sal ammoniac, sulphur and different species of stones used in the fabrication of gold and silver, liquefaction of pearls to prepare a single large one, calcination of copper, distillation of marcasite, transmutation of tin into silver, tin plating of copper and combination| amalgamation of mercury with antimony, lead, sal ammoniac and other substances.[15]

Amongst the Arabic treatise the *Book of Crates* also called the *Treasure of Treasures* is the most explicit. It describes in detail the preparation of *Molybdochalcum*, identified as an alloy of copper and lead and the most important elixir understood as a tincturing agent that rendered silver into gold. The *Molybdochalcum* is the freely used name for an amalgam and one such amalgam is prepared as follows:

> "Take the required weight of ores; combine them with mercury and operate till the product becomes an igneous poison. When bodies are burnt and fixed, the product is incombustible sulphur, otherwise dry sulpur. By mixing the igneous poison and sulphur pure gold is brought forth".

Crates' *Treasure*, though primarily concerned with transmutation, is mainly disposed to natural philosophy, gain knowledge and improve the soul.

The *Book of El-Habib* claims that all creatures are constituted of *agent* and *patient*, otherwise male and female. And the vessels specified for philosophical works are a mortar, boiler, flagon, receiver and crucible with mystical interpretation attached to each one of them. The four elements fire, air, earth and water could be derived from sulphur, cinnabar, magnesia and mercury respectively. Proper blending and fixation of the elements may help produce any substance desired. Similar theorems are narrated in the *Book of Ostanes the Wise*. The autor claims to have known some one who had seen the *Philosopher's Stone* for continuously forty years. Ostanes, it is reported in text, was so possessed to find the secret 'that he lost his appetite and sleep till he had a vision. A stranger appeared and led him through to seven doors of wisdom, the keys of which were in the keeping of a monster with a vulture's wings, the head of an elephant and a dragon's tail. The creature devoured its own parts but when invoked in the name of *Allah the Almighty*, it delivered the keys to Ostanes who opened several doors, the last of which had a plate with inscription in seven languages. The ones he could read were Arabic, Persian and Sanskrit. He saw a body comparable to a lamp; the soul to an oil and the spirit to its wick. The story goes on to explain as how to harness the creatures in order to learn the secrets of life and science'. [16]

The above Syriac and Arabic treatises were surpassed by *Jabir Ibn Haiyan's* chemical corpus which, according to the *Kitab al-Fihrist*, a Muslim encyclopaedia of the tenth century C.E. consisted of some 500 books, some large and some small, on a wide range of subjects especially chemistry. There are over fifty of them known to exist. Later we propose to undertake and discuss in detail and chronologically other Muslim chemists who, like *Jabir*, happen to be giant Muslim chemists in the history of Islam.

Jabir Ibn Haiyan (cir 776 C.E.)

Abu Musa Jabir Ibn Haiyan al-Azdi entitled also by other surnames as *al-Tusi, al-Tartusi, al-Harrani* and about all *al-Sufi* [17] thus characterising him as a *Sabian* (born probably in 72|722 C.E.) became known in 776 C.E. in *Kufa* (Iraq). *Jabir*, also written as *Djaber* in German, bears the Latin name of *Geber* which name and whose corpus of chemical writings have been identified unequivocally [18,19] as recently as 1923. Born in the town of *Tus* near the present day *Meshad* to a druggist, *Haiyan*, who belonged to the famous tribe of *al-Azd* in South Arabia and later migrated to and settled in *Kufa, Jabir* grew up as a philosopher, physician, mystic and above all, chemist. Close to the *Abbasids* as he was, *Haiyan* was assasinated by the Caliph's agents during one of his political errands in Persia thus leaving the small fatherless *Jabir* on his own. *Jabir* was sent to Arabia where he studied Islamic theology under the guidance of his master by the name of *Harbi*. As a young man he studied Islamic Jurisprudence and benefitted in mysticism and theosophy from the sixth celebrated *Sh-i-ite Imam, Ja' far Iban Muhammad al-Sadiq* (700—765 C.E.) who himself happened to be a man of vast learning in all branches of art and science and as would be expected of a novice *Jabir* revered him and attributed devoutly his own works to his religious mentor to whom he refers profusely in his writings.

Jabir, the progenitor of modern chemistry, was a learned courtier of the fifth *Abbasid Caliph, Hqun al-Rashid* 786—809 C.E.) renowned in the *Arabian Nights* for his Just rule. The Caliph's viziers, the *Barmecides*, consulted *Jabir* as the family physician. Because of their political misdemeanours in 803 C.E. the *Barmecides* lost their favour with the Caliph who expelled them and so also *Jabir*.

The chroniclers have not been able to provide enough material for a sufficiently detailed biography as *Jabir* has been reticent to talk about himself in his treatises. However, as a result of the translations it has now been proved from the bibliographer *Ibn al-Nadim's Fihrist* [21] of 987 C.E. a biagraphy and bibliography of Muslim men of learing that when *Jabir* was expelled from Baghdad he returned to Kufa and lived there till after the accession to the Caliphate of the *Caliph al-Maman* in 813 C.E. when he returned to the Court again. Tradition has it that Jabir's laboratory was discovered in the early eleventh century C.E. during the demolition and rebuilding of a street, *Damuscus Gate*, in Kufa. In it were found a mortar and a large piece of gold 'which', says the chronicler, 'the king chamberian took possession of [21] This kept alive the wistful dream that men could manufacture. the precious metal'. [22]

Now the *Caliph al-Mamun* (d. 833 C.E.) was a great patron of art and science and one may assume beyond any doubt that *Jabir* would have influenced him in his latter efforts in their developments. *Jabir Ibn Hajyan*, a great chemist, unrivalled later by none but *Al-Razi*, wrote a celebrated corpus of chemical writings in Arabic

which sustained his indelible name in the history of chemistry. Whilst reasoning out genuinely the objective and experimental approach of Muslim alchemists, an orientalist [24] has credited *Jabir, inter alia,* as follows:

> "It is impossible to disown that Alchemy has contributed most directly to the creation and progress of modern physical science. Alchemists were the first to put the experimental method in practice, that is, faculty of observation and induction in its application to scientific researches— Moreover, by unifing a considerable number of facts and discoveries in the order of molecular actions of bodies they have brought modern chemistry into being. Prior to the eighth century C.E. *Geber* (Jabir) put into practice the rules of that experimental school, the practical code and principles of which were merely developed later on by *Galileo* and Francis Bacon. The works of *Geber—The Sum of All Perfections* and the *Treatise on Furnances*—contain an account of progress and operations conformed wholly to the methods made use of at this day in chemical investigation".

The rapporteur follows it up in a manner that interprets the *Qur'anic* injunctions[25] insisting that Muslims ponder over the processes of Nature which, in fact, the Alchemists did, thus:

> "They (alchemists) prepared the advent of the positive sciences by basing the interpretation of phenomena on the observation of facts and openly breaking with the barren metaphysical tradition which had checked so long the progress of the human mind".

Jabirean chemical theorem followed the Aristotilean concept based on the four elements, air, water, fire and earth with the additional parameters of four cosmic qualities, heat, cold, dryness and moisture. *Jabir* was in agreement as to their influence on the four humours blood, phlegm, bile and melancholy as known from *Hippocrates* (460—370 B.C.); The truth (spirit) coming from beyond this material world had been integrated into the four humours in Jabriean corpus, and the balance *(mizan)* imposed as the key to the whole order including the health of the human body'. [26, 27] Likewise, *Jabir* claimed that matter and their individual states followed a certain permutation and combination of four elements and the four cosmic qualities thus characterising individual substances. With respect to the metals, he propounded that the proportions of *mercury* and *sulphur* determined the nature of different metals. The most natural combination of the two provided bold and the defective combination led to the formation of silver, lead, iron and copper. Further, he claimed that transmutation of base metals into gold was possible for they had mercury and sulphur as the inherent constituents. This theorem also formed the basis of Lavoisier's phlogiston theory that also crumbled with the enunciation later of Dalton's Atomic-Theory.

Accordingly, despite his leanings to mysticism *Jabir* was in search of the transmutation of base metals into gold with help from the Elixir or *Philosopher's Stone.* It is not known whether that was discovered, but efforts in this direction led to the discovery of a large number of chemicals used as indispensable medicines then and thereafter. [2] Consequently, *Jabir* wrote the *Book of Poisons* which discussed in detail the poisonous nature of litharge, cinnabar, arsenic and venoms. Coincidentally, *Jabir* offers the present day *ultramarine blue* as an antidote for snake venom. Many of his medicinal recipes are reproduced anonymously in Latin works—*Compositions ad Tigenda* and *Pappae Clavicula*—which also include preparation of pigments, gilding of metals, dyeing of skins, colouring of glass used in mosaics, writing ingold, fermentation and distillation of alcohol and vinegar.

Book of Properties.—In this book *Jabir* is quite definite as to the numerous preparations and their properties. Starting with litharge and vinegar, he has described the preparation of a white salt having neutralised the excess vinegar with crude sodium carbonate. Further, he has described the preparation of the red cinnabar from mercury and powdered sulphur.

Book of Balances.—Besides chemical preparation *Jabir* has throughout this book emphasised on the definite proportions of the reactants for chemical preparations. Also, he has taken a great deal of pains to impress upon the reader that the book consisted of not propositions but definite experimental observations.

The Book of Seventy (Booklets): The book translated into Latin by *Gerard of Cremona* (1114—1187—C.E.) is the authentic rendition of the Arabic text discovered in Cairo by *Max Meyerhof* in 1926 C. E.

The Sum of Perfection.—This is an abridged Latin translation of the undoubted Arabic manuscripts ascribed to *Jabir* who, in this book, challenges the disbelievers of transmutation. Yet his recipes are dismissed by the orientalists as talisman and based on superstitions. [29,30]

Book of the Divine Science: *Jabir* knew well the principle of indestructability of matter and the principles involves in chemical changes. In the Holmyard translation it is illustrated thus:

> "When mercury and sulphur combine to form a single substance it has been thought that they have essentially changed and that entirely new substance is formed. The fact is otherwise, however. But the mercury and sulphur retain their own nature—all that has happened is that their parts have become attenuated and in close approximation to one another, so that to the eye the product appears uniform. But if one could set up apparatus to separate the particles of one short from those of the other, it would be apparent that each of them has remained in its own permanent natural form that has not been transmuted or changed. We know, indeed, that such transmutation is not possible for natural philosophers".

Kitab al-Bahth: [31, 32] The book describes how composition of individual components of mixtures/admixtures of various alloys, pulverised and embedded material, could be determined. It relates the famous story of the *King Maliqiyadus* (Domitiam) who received a present of a crown made of gold, silver, iron, lead, diamonds, rubies of all kinds, emeralds, pearls, carmelians and amethysts and all other kinds o precious substances, and was anxious to know the amount of each component. He put across his proposition to all philosophers but to no avail. Finally *Archimedes* came to solve this problem and wrote a text book *The Weight of the Crown* that described the processes indicating the quantity of all its components and the principles involved.

The Book of the Monk (Kitab ar Rahib): *Jabir* attributes this book to a monk who demonstrated to him practically the transmutation of a bar of iron into gold through a series of operations which are precise and definitive. [34]

The Book of Mercy: In this book *Jabir* maintains that the most stable things are those which contain mostly body with least spirit; such are gold, silver and analogous substances. Things the most fugacious among bodies are those which contain the most spirit; such are mercury, sulphur and arsenicon. *Jabir* further states: [34]

> "In the whole world things are mixed with one another. You will not find fire which does not contain some cold, nor cold which does not contain some heat: no dryness without a little humidity, no humidity without dryness............When things meet a force more intense than their large mass, the whole mass takes the nature of the force: for example, a small quantity of ferment transforms a considerable mass of dough".

For further reading and for a comprehensive list of Jabirean corpus, reference can be made to the literature [18, 21, 35] by the researchists.

Seats of Learning and Famous Men

Harran [3] in North West Mesopotamia, the inhabitants of which were later renowned as *Harranians* or *Sabians*, was the capital city of the *Umayyad Caliph al-Marwan* (774- 850 C.E.) and a meeting place of carayans from East and West since 1400 B. C. They were non-Muslims who worshipped stars and conducted human sacrifices but were tolerated by Muslim ruler as they were mistaken as *Sabi-un* hence *Sabians* mentioned in the *Holy Qur'an*. Nonetheless names of the great Muslim chemists are associated with this place and very well verified in the *Dabistan* by the Persian poet *Shirazi* [37] (d. 1640 C. E.).

Al-Nadim (d. 987/8 C. E.) has described the Sabian names given to and the shapes specified for the stars and their influence and relationship with the earthly matter. *Abu Ma'shar's (Albumasar*, 9th cent. C. E.) works translated into Urdu by *Muhammad Hussain* as *Makhzan al-Adwiyah* quote the Sabian

name for mercury as *Safid ruh* (white bronze, zinc). *Al-Dimashqi* (1265|7—1326|7 C. E.) has interpolated mercury (*zibaq* or quicksilver) as something consisting of three metals (*ma'din*) and *Khar-sini* (Chinese clay or porcelain but supposed to be sinc). *Ibn al-Washiya* (d. 912 C.E.) has assigned symbols to minerals and metals gold, silver, lead, iron and tin based on the planetary signs. The symbol for quicksilver (*zibaq*), for example, is a white star in a black circle. Similar symbols were assigned by *al-Dimashqi*, *Muhammad Ibn Ahmad al-Khawarizmi* (d. 976 C.E. in *Mafatih al-Ulm*, and *al-Qazwini* (d. probably 1276 C.E.) in '*Aja'ib al-Mukhluqar* and *Ibn Mansur* (d. 13th cent. C.E.).

Chemistry writings in the 10th cent. C. E. were developed by the *Ikhwan al-Safa* (Faithful Brothers), a society of Arabian scholars founded in *Basra* about 950 C. E. Their writings mainly issued about 975—1000 C. E. were based on the matter composed of Aristotilean and Neoplatonic water, air, earth and fire. Plants and animal kingdom contained these components and minerals were divided into 7 classes:

(i) Stoney, but fusible and solidifying on cooling; *eg.*, gold, silver, copper, iron, tin, lead, glass.

(ii) Stoney, but not fusible; *eg.*, diamond, hyacinth, cormelian.

(iii) Earthy, soft, not fusible but easily separated, frickle; *e.g.*, sale, tale, vitriols.

(iv) Watery; *eg.*, quicksilver (meaning mercury).

(v) Aerial or oily, consumed by fire; *eg.*, sulphur, arsenic (meaning sulphides).

(vi) Vegetable like; *eg.*, coral.

(vii) Animal like; *eg.*, pearls.

The treatises described in detail the mutual effect of the basic four components in conjunction with different proportions of mercury and sulphur. They were unfortunately publicly burnt in Baghdad in 1190 C.E. for their so-called blasphemous nature. Max Stallman [38] compliments the *Faithful Brothers* thus:

> "The books of the Faithful Brothers contain much in the way of chemical facts that show a knowledge based upon practical experience in chemical operations of distillation which are spoken of in the preparation of water of roses and violets, and of sharp vinegar. ....".

Lippman,[39] lists all in the some 60 Muslim chemists and their writings from 9th—14th Century C. E. Little is known of many of these names as their writings are extinct. Also, the space and time prevents us from a detailed study here. Accordingly, some pioneer chemists are listed here with their brief biographical sketches and important works followed by some critical comments.

Al-Razi (854—925 C.E.)

Abu Bakr Muhammad Ibn Zakariyyah al-Razi known in the Latin West as *Rhazes* was born in *Rayy* near *Tehran* in Iran, directed hospitals in *Rayy* and later in *Baghdad*, visited *Rayy* freqently where he eventually died and was buried. He wrote on medicine, alchemy, philosophy and religious criticism, the most celebrated work being *Kitab al-Tibb al-Ruhani* (The Book of Spiritual Physick) and *Sirat al-Faylasut* (The Philosopher's Waw of Life), *Doubts Concerning Galen* and *Al-'Ilm al-'Ilahi* (The Divine Science). He applied his chemical knowledge to medicine. He wrote the *Kitab al-Hawi* (Continens), an enormous encyclopaedia of medicine, and a comparatively smaller compilation, the *Kitab al-Mansuri* (Liber Almansoris), consisting of ten books. Also, he compiled the *Kitab al-Jadari Wal-Asba*, a monogram on smallpox and measles. Besides this masterpiece of Muslim medicine, his contribution to gynaecology, obstetrics and opthalmic surgery are well-known.

Al-Razi classified chemical substances explaining in detail the precise accounts of methods he followed in this classification and has, in one of his writings, described some 25 pieces of chemical apparatus.

Generally speaking *al-Razi* believed that 'medicine is a philosophy and this is not compatible with the renouncing of criticism directed at the leading (authors). Accordingly, a man of science who knows the works of his predecessors, has, because of this, an advantage over them—however eminent they may have been—and can proceed to new discoveries'. [40]

Al-Razi was an atomist and his views thereon resembled those of *Democritas*. 'The abstract matter', he maintained, 'consisted of indivisible atoms having extensions. For material, in contradistinction to geometrical, bodies are not divisible *ad-infinitum*. On the other hand, if the visible material bodies were not composed of atoms, it would be necessary to suppose that the world were not created in time'.

Further *al-Razi* believed that mixed in various proportions of vacuum the atoms produced the elements earth, water, air, elemental fire and heavenly element. Depending upon the, vacum between the atoms, the substances were dense or light, transparent or opaque. And the heavenly bodies which have an equilibrium between matter and the vacuum particles, revolved in a circular motion.

Among the later Muslim philosophic scientists *al-Razi* is regarded as anti-religious when he is studied especially in the context of his *The Tricks of the Prophets*.

Al-Biruni (d. 1048 C. E.) compiled a list of *al-Razi's* publications wherein he also related a dictum: [41]

> "Al-Razi was accused of destroying the wealth of people (by means of alchemy) destroying their bodies (by means of medicines) and corrupting the souls (by means of defamation of the prophets)".

Notwithstanding the overall criticism of his particular religious beliefs, *al-Biruni* regarded *al-Razi* as a great physician and alchemist.

Ibn Sina (980—1037 C.E.)

Abu Ali Al-Hussein Ibn Abdullah Ibn Sina (b. Kharmaithen near Bukhara—now Uzbekistan, USSR—980 C. E., d. Hamadan in Iran 1037 C. E.) well-known by his Latin name *Avicenna*, was a great encyclopaedist, philosopher, mathematician, astronomer, physician, in all 'the most famous scientist of Islam and one of the most famuos of all races, places and times'. [42] In him reached the climax of the Muslim science and philosophy. He wrote both prose and poetry in Arabic as well as Persian. A lucid and precocious writer, he is very unambiguous and forceful in his thought. Besides his philosophic encyclopaedia, *Kitab al-Shifa* (Sanatio) and the book of logic, *Kitab al-Isharat wal-Tanbihat* (The Book of Signs and Admonitions), *Ibn Sina's* most celebrated book of almost a million words is the *Qanun fil-Tibb* (The Canon of Medicine), an immense codification of the whole ancient and medieval Muslim knowledge, and for a treatise on cardiac drugs which is hitherto unpublished. They outline pharmacological methods and some 760 different drugs for carefully observed symptoms of mediastinitis, pleurisy, phthisis and its contagious nature, control of diseases disseminated through water and soil, skin and sexual problems and perversions, nervous ailments including love-sickness and many psychological and pathological diseases. The *Qanun* is superior in many respects to *al-Razi's Hawi* and even the works of the renowned *Galen*. As an alchemist he did not believe in the possibility of transmutation because he appreciated that there were much deeper rather than superficial differences amongst different metals and merely gilding, colouring and bronzing the metals did not alter their essence.

Ibn Sina classified natural sciences into two categories of eight principal and seven subordinate sciences and wrote fairly detailed accounts of each and every section. He wrote *al-Kimya* after performance of alchemical experiments.

With the pinnacle achievements of *Ibn Sina* the climax of Muslim art and science was reached and decline in Muslim though began to dawn. Later in the history of Islam only rarely did people *Ibn Sina* reappear.

Ibn Rushd [42, 43] (1126—1198 C.E.)

Abu'l-Walid Muhammad Ibn Ahmad Ibn Muhammad Ibn Rushd also known as *Averroes* (b. Cordoba, Spain, 1126 C. E., d. Morocco, 10 December 1198 C. E.) *Ibn Rushd*, a philosophic physician hailed from a distinguished Cordoban family of lawyers. His grandifather, *Abu'-Walid* the elder (1058|9—1126|27 C. E.) was *Qadhi al-Jama's* (Chief Justice) and later his father was also a *Qadhi* (Justice) in Cordoba. He received a good legal education from his very childhood and as a young man wrote 3-4 praiseworthy books on *Malikite Law*. He received his theological training under the guidance of *al-Hafiz Abu Muhammad Ibn Rizq* and learned by heart the *Muwatta' of the Imam Malik*.

Also well-familiar with *Ash'arite Works* such as those of *Abu'l Ma'ali al-Juwayni alias Imam al-Haramayn*, the teacher of *Abu Hamid Muhammad al-Ghazali* well-known by his Latin name *al-Gazzale* (d. 1111 C. E.), *Ibn Rushd* knew very well al-Ghazali's works. He commanded a wide knowledge of Arabic literature. But tired of the muddled and unscientific nature of philosophy, he showed great interest and inclination in material sciences. He studied medicine under *Abu Ja'far Haran al-Tajali* of Seville and served as physician and later on the retirement of *Ibn Tufayl* as chief physician to the Fatimid ruler *Abu Yaqub Yusuf* (1163—1184 C. E.) and his son *al-Mansur Yaqub Ibn Yaqub* (1184—1199 C. E.).

Ibn Rushd wrote his famous *al-Kulliyat fil-Tibb* (General Medicine) in about 1169 C.E. The *Kulliyat* is divided into seven books entitled Anatomy of Organs, Health, Sickness, Symptoms, Drugs and Foods, Hygiene and Therapy. He also wrote a *talkhis* (abstract) of Galen's Works and a commentary (*Sharh Urjuzat Ibn Sina*) in his *Poem on Medicine (Urjuza fi'l-Tibb)*. Great Muslim as he was he maintained : [44]

> "He who is occupied with science of anatomy will have more faith in God".

Ibn Rushd worked first from Seville and later from Cordoba where he had the honour of closeness with the royal court and died there. *Ibn al-Arabi* (d. 1240 C. E.) who was still young attended his funeral where his books were also piled alongside. *Ibn al-Arabi* who acknowledged the good intentions of the philosopher but disapproved his method is reported to have said that 'these philosophical works were equal to no more than a corpse'.

Now it was during the second half of the twelfth century C. E. that Muslim chemists like *al-Hasan al-Ramnah*, the author of a military treatise which describes in detail the preparation and purification of saltpeter, have given the recipes for gunpowder which was developed later with the advent of more improved firearms. Also, during the period in question Muslim druggists are known to have prepared by distillation rose-water and other essences. A Syrian Muslim historian had written a book in Arabic on the preparation of perfumes. The chemistry of gunpowder, porcelain, glass, colours, perfumes etc., was, therefore, all that flourished during this period.

It was during 1171—1188 C. E. when *Sultan Salah-ud-Din* is known to have sent some 40 pieces of porcelain as a present to the Sultan of Damascus. [45] Besides this no concrete advance was made in the field of chemistry except critical reviews of the works of earlier Muslim chemists by Muslim chemists.

For example the Persian poet *al-Tughari* wrote several al-chemical treatises, one of which, the *Haqaiq al-Istishhad* was a refutation of *Ibn Sina's scepticism* on transmutation of metals. Similar critical writings were those of *Abdul Latif*

and *al-Jawbari*. *Abu'l-Hasan Ibn Musa Ibn Arfar'ra'sahu al-Jaiyani Burhan ud-Din* (d. in Fas in Morocco 1196/7 C. E.) compiled a collection of poems on the Philosopher's Stone entitled *Diwan Shudhur al-Dhahab Fi Fann al-Salamat*.[46]

13th—14th Century C.E.

As has been said earlier after Ibn Sina's contribution to chemistry there followed a slow decadence in the interest and promotion of chemical research by Muslim scientists. However, there were some men of learning who spent their efforts and time in the study of chemistry and even that in the history of Muslim chemistry and other sciences. Some of the names which are famous in their own right as chemists or historians are listed as follows:

Abd al-Rahim (Rahman) Ibn Umar al-Dimashqi al-Jawbari Zain al-Din[47] was born in *Jawbar* near Damascus and flourished during the *Urtuqid* Sultans *Amid* and his successor *Rukan al-Din Mudud* (1222—1231 C. E.). Previously he travelled to India and visited and stayed in *Harran* from 1216 C. E. to 1217 C. E. and in *Qunlya* during 1219—1220 C. E. He wrote mainly on the Muslim history of chemistry, especially the one pertaining to the frauds and deceptions of alchemists. He dedicated this work, *Kitab al-Mukhtar Fi-Kashf al-Israr Wa Hatkal al-Astar* (Revelations of Secrets and Tearing of Veils), to the *Sultan Mudud*.

A lesser known Egyptian Muslim has been *Abd al-Latif*, a contemporary of a Syrian physician *Ibn al-Suri* and *Farid-ud-Din Attar* (d. 1229 C.E.), a druggist author of a sufic classic of person verses, *Mantiq al-Tayr* (The Conference of Birds).[48] wrote particularly on botanical aspects of plants and animals but also dabbled in chemistry.

Abu'l Qasim Muhammad Ibn Ahmad al-Samawi al-Iraqi flourished in the second half of the 13th century C.E. and wrote extensively on the transmutation of six metals tin lead, iron, copper, silver, gold, in a number of treatises attributed to him, the most important being *Kitab al-Ilm al-Muktasab Fi-Zirat al-Dhahab* (knowledge Acquired Concerning the Cultivation of Gold). These metals he maintained, had accidental difference of heat which could be eliminated with the help from *Al-Iksir* or Elixir.[49] The book, however, lacks practical details. Besides his other work, *Zubdat al-Talab Fi-Zar al-Dhahab* (Cream of the Search upon the Soaring of Gold), he wrote commentaries on the chemical works of *Ibn Arfa'ra' sahu and al-Razi*.

Written in 1300 C. E. in *Tabriz*, a Persian text ascribed to *Abu'l-Qasim Abdullah Ibn Ali Ibn Muhammad Ibn Abi Tahir al-Kashani*,[50] explains the manufacture of faience, the ingredients needed, their mixtures, the kiln processes and implements, the methods of glazing and decorating of earthenware, an unparalleled work until the 16th Century C. E. Of the early part of the 14th Century alchemists besides *al-Dimashqi* there were some who courted *Hulaqu's*

favour and whose accounts were reported by the great historian *Rashid al-Din*. There was also a well-known grammarian alchemist, *Abu Haiyan* (1280—1344 C.E.) of Egypt who wrote *Shudhur al-Dhahab Fil-Iliksir*, the contents of which have not yet been established finally. Incidentally, it is the same *Abu Haiyan* to whom has been erroneously ascribed some of the works of *Jabir Ibn Haiyan*.

The last of the Muslim Arab alchemists was *Izz al-Din Ali Ibn al-Jildaki* [51] who flourished in Cairo in 1339—1342 C.E. and died there probably in 1360 C.E. He is known to have written some 20 treatises on the subject, the most important being his commentaries, *Al-Badr al-Munir Fi Asrar al-Iksir* (The Brilliant Moon on the Secrets of Elixir) and *Ghayat al-Surur* (Limit of Joy) on the Spaniard *Ibn Arfa'ra'sahu's Shudhur al-Dhahab Fi Fann al-Salamat*. Another book that appertains briefly to the history of alchemy is *Al-Misbah Fi Asrar Ilm al-Miftah* (The Lamp on the Secrets of Alchemy) dealing mainly with the contributions of *Khalid Ibn Yazid, Jabir Ibn Haiyan, Muhammad Ibn Umail al-Tamimi, Maslama Ibn Ahmad al-Majriti, al-Hussain Ibn Ali al-Tughrai, Ali Ibn Musa Ibn Arfa'ra'sadu, Abu'l-Qasim al-Iraqi*. *Al-Jildaki's* works are avilable but only in the form of original manuscripts which have not yet been studied in depth and critically.

The second half of the 14th Century C. E. brought forth no Muslim alchemist who would have practised his chemistry. *Ibn Khaldun* [52] has, however, given accounts of earlier alchemists. He dismisses some of them as non-practising chemists and others as gullible in their writings. Also he reproduces in his *Muqaddamah* a long letter of *Abu Bakr Ibn Bashrun* to his codisciple *Ibn Samah* complaining about the secrecy and obscurity surrounding the alchemical terminology.

There is an interesting account of the advent of Islam amongst the Chinese, also called *Hui-Hui* Muslims, the most renowned Chinese Muslim chemist being *Shen Chi-Sun*, a Chinese ink manufacturer who flourished in 1398 C. E. He wrote an ink classic that gave the various processes in the fabrication of ink cakes with some 27 illustrations depicting the production of lamp black and its sifting, preparation of glue and moulding of cakes.

Conclusion

The science of chemistry and the modern world owe a debt of gratitude to the Muslim alchemy of the medieval times which has laid down firm foundations for the West to develop later. To mention only one aspect of it the generic Arabic names for chemical reagents|apparatus, for example *al-kimiya* (alchemy), *al-kuhl* (alcohol), *al-imbiq* (alembic), *al-qili* (alkali), *al-malgham* (amalgam), *buraq* (borax), *kafur* (camphor) and *al-iksir* (elixir) etc., are in daily use by the modern chemist.

From the beginning of the 15th Century C. E. the West, acknowledging most sincerely the heritage of Islam, has developed it further and taken a lead in all branches of science and technology, and there have not been any Muslim scientists mentioned in the history of science for worthwhile and substantial contributions to chemistry and medicine till recently. Even today there is a profound lack of cognitive research carried out at universities and research establishments of the Muslim world. The staff and the research experts are trained and educated in the West. More often than not they have research publications pertaining to their research studies abroad published in the international research journals, and, in many cases, that is the beginning and end of their research career. Nonetheless, one can safely yet fairly commend a few Muslim chemists of 20th Century C. E., much less to name them, who have marvelled in chemistry research. They have been only a handful in number amidst the growing *Ummah* (the Muslim Nation) now 1,000 million believers. There are several factors for this lagging, backwardness and intellectual poverty. With the grace of Allah the Almighty the *Ummah* is becoming conscious of its shortcoming and hopefully, with the resurgence of religious orthodoxy, a renaissance of scientific education and research may also take place. There is no dearth of natural resources, richness of human brains and industry. What we lack is their proper evaluation and due appreciation, encouragement and steadfastness. May Allah the Almighty grant us the ability *(taufique)* to help rectify it thus allevating the suffering minions and poor members of the *Ummah! Amin!* Notwithstanding efforts of the leading Muslim intellectuals and their efforts,[53] a critical self-examination of our programme of work in the light of the proposals [54] set out for the *Islamic Science Summit—International Congress on Science through XIV Centuries of Islam—1983* should be made and a resume of plans put down for a subsequent initiation into a comprehensive and massive research.

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MUSLIM CHEMISTS—LINK BETWEEN ANCIENT AND MODERN TIMES

"I have truly done that everyone is bound to do in respect of any particular science, that is, to accept gratefully the original contributions of his predecessors, to correct fearlessly the errors that come to his notice, and to preserve what he himself discovers, and leave it as a record for future generations that are to follow him in time". (Al-Beiruni, d. 1045 A.C.).[1]

The development of science throughout its history is a continuous growth process. The initial concepts are shrowded in the semi-mystical origin of human civilizations. These initial stirrings have, over the centuries, provided the motive force for the development of knowledge, its transmutation into sciences, leading to the present day explosion of knowledge.

It is undoubtedly the growth of political consciousness based on religious and recial alignment which led to the deliberate distrotion of presentation of historical development of science. Muslims have been its greatest victims. It is only recently that attempts have been made to make an objective assessment of history of science, comparatively free of racial or religious prejudice.

The rise of Islam accompanied by its negation of dogmas and denial of unquestioning acceptance of prevalent ideas marks a revolutionary stage in the development of science. Perhaps the greatest contribution of Islam to science is summed up in its contribution towards awakening of the spirit of enquiry.

In case of chemistry it is obvious that the teachings of the ancients provided its initial theoretical framework. But it is in this field that the Muslims made their gratest contribution. It was developed into an elaborate subject with well defined parameters by generations of Muslim scholars who provided it with a scientific basis. In this context Al-Razi (865-932 A.D.) is of prime importance. His greatest contribution was the rejection of magical and astrological practices. He did not accept anything which could not be proved by experiments, tests or actual observations. He is also reputed to have pioneered the use of chemical preparations for medical purposes. His influence was not restricted to Muslim world only. Europe came under his sway after twelfth century.

According to some European writers, the advance was possible as Muslims had no inhibition to undertake manual work and did not suffer from the disadvantages of caste system. J. D. Bernal, while speaking [2] of Arab contribution to chemistry states "They were also able to draw to an extent difficult to ascertain, on the extensive chemical knowledge of Indians and Chinese. 'Chemistry to a different degree from astronomy and mechanics, depends on widespread experience of large number of substances and processes.' It can only become a science

if these can be brought together and transmitted as agraspable whole, and provided with some general principles. This is what Arabs did, and what justifies their claim to be the founders of chemistry.

The introduction of experimentation and employment of chemical knowledge in industrial processes are largely the contribution of Muslims. It was a significant advance on the theorization and retionalization of the Greeks. Most of the basic techniques and processes used today were known to the Muslim chemists. Their usage and interpretations may have at times been different. The techniques of crystallization, distillation, sublimation, filtration, amalgamation, cupellation and combustion or calcination were widely used. Jabir Ibn Hayyan (776 AD) well known as Geber is credited to be the father of Arabic alchemy. He improved basic techniques, layout and dressing of laboratories and undertook comprehensive classification of chemical substances. It was Jabir who introduced Oriental alchemy to Europe and is rightly considered to be the forerunner of modern chemistry. George Sarton states, that "he appears already as a very great personality one of the greatest in medical science". Max Meyerhoff holds that Jabir's influence was felt throughout the whole history of European alchemy and chemistry.

The technique of distillation has played a key role in the development of chemistry. The distillation apparatus known in the ancient times was in the form of keotakis or alembic (ambix). The Muslims greatly improved both the apparatus and technology. Profound scholarly attention was devoted to its study alongwith other technologies which opened the way for understanding chemical transformations objectively. The Muslims for the first time made use of steam distillation for large scale extraction of perfumes and essential oils.

Terpene chemistry, which contributed immensely to the foundation of modern organic chemistry owes its development to the technique of steam distillation perfected by the Muslims. Steam distillation is even today the method of choice for obtaining essential oils and monoterpenes. Various essential oils and essential oil drugs as of old are used as skin stimulants, anti phlogistic agents, sedatives, expectorants, stomachichs cerminatives, diuretics, antiseptics, and disinfectants etc. These medicinal uses were generally known to Muslim chemists. But the most common use of the volatile drugs as well as of the separated oils has been for flavouring purposes. Therefore, in addition to their proper pharmaceutical uses, the volatile oils have been employed as flavours for food and confections and in the spice, perfume, and cosmetic trades, as well as in the pharmacy, where they have often been used as flavouring agents to mask the disagreeable taste of certain medicines. Terpenoids have also found use as pesticides and fungicides in agriculture and horticulture on the basis of their antimicrobial and insecticidal properties.

It is a well established Islamic concept that there is no disease of which nature does not provided a remedy. This led generations of Muslim herbalists, pharmacologists and physicians to seek new and usefull drugs for the treatment

of diseases and ailments. The Muslim period saw a remarkable advance in the knowledge and variety of drugs, their nomenclature, identification and uses. A systematic study of medicinal plants in different seasons and stages of their growth was undertaken. This obviously provided the basis of medical botany. Arab scholars made a speciality of studying single and compounded drugs and diets, their origin from the natural kingdom, their pharmacological action on humans in health and sickness. Here one can clearly discern the beginning of pharmaceutical chemistry. Professor Witkop in one of his recent publications [3] in support of natural products chemistry has underlined the significance of naturally occurring compounds as medicine and therapeutic agents. He mentions that the "One" who created the lock has also created the key. (The remarkable similarity of this statement with Islamic tradition is unmistakable).

Some significant work on the subject has been done by Hakim Mohammad Said on the subject of Muslim contribution to pharmaceutical and natural products chemistry. He has compiled a list of medicinal plants added to the Materia Medica by Muslim scholars. It can be safely assumed that these were used by Muslims for medical purposes. A modern pharmaceutical chemist, when dealing with compounds isolated from these medicinal plant with centuries of ethnotherapeutic use can consider that the clinical trials for all practical purposes have already been conducted. One is tempted to speculate on the contribution of these developments in stimulating research in modern times. The plants introduced by Muslim in Materia Medica have yielded through modern research, active principles of significant medical value.

(a) *Croton tiglium (Dand)*.—Kupchan and coworkers (Kupchan *et al* 1976) have isolated a phorbol derivative, phorbol 12-tiglate 13-decanoate) exhibiting anti-leukemic activity.

(b) *Pinus deodara (Deodar)*.—Five sesquiterpene alcohols have been isolated [5] of which himachalol and centdarol exhibited [6] pronounced spasmolytic activity.

(c) Solanum xanthocarpum (Hadaq) is the source of valuable glycoside solasonine whose aglycone is the steroidal alkaloid solasodine, one of the precursors for the manufacture of steroid hormones.

(d) Cassia absus Linn. (Bashma). has yielded [7] alkaloids chaksine and isochaksine which have shown [8] hypotensive activity.

(e) *Semercapus anacardium (Balazur)*.—The capsules of the powdered root have been marketed under the name Anacarcin Forte by Indians for the cure of several varieties of cancer.

One of the most outstanding figures among Muslim alchemists, Jabir Ibn Hayyan is understood to have prepared an Elixir which had metallic as well as harbal components. He used this Elixir in desperate medical cases with good results. This Elixir seems to have similarity with modern chemotherapeutic agents the metal chelates, on which research work is in progress nowadays.

These metal chelates, when present in body fluids or tissues are quite active against a wide range of micro-organisms including even those which show high resistance to current antibiotics. Use of fungus in the treatment of wounds by the Muslim practitioners which was known also to Greeks is another example of the practice of chemotherapy.

In conclusion I would like to draw attention to the false notion popularized by western writers that Levoisier is the founder of modern chemistry. In this context Doctor Le Bon maintains that chemistry or any other branch of science was not established all of a sudden. Their growth is the outcome of a long evolutionary process. He emphasizes the contributions of Arabs in the development of chemistry. They are credited with having established almost a thousand years ago chemical laboratories in which they made experiments, and published the results of their research. Without the Arabs, Levoisier would not have opened the way to modern chemistry.

People engaged in science are interested in the present and the future. They are apt to relegate the past as dead and gone. A little reflection would however show that without a correct historical perspective both the present and the future may be distorted. The dehumanizing trends discernable in science, with nuclear holocaust looming large on the horizon of possibility, there is all the urgency to recharter our course in the perspective of the development of human civilization.

In case of Muslims, moral stagnation and decadence are directly attributable to the renunciation of spirit of enquiry, liberal ideas, and innovation so much the forte of Muslim scholars of the old. In the rapidly changing world Muslims seem to have stood still, permitting others to take lead. To shake off the inertia, a scientific and dispassionate enquiry into the causes of this sorry state of affair and a plan of action based on the result of this enquiry to re-enter the main stream are basic essentials. In case of pharmaceutical chemistry and drug research a realistic approach towards blending the mediaeval with the modern is overdue.

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THE CONTRIBUTION OF MUSLIMS TO THE SCIENCE OF ANATOMY

There is a widespread belief, absolutely wrong indeed, that the muslims contributed nothing to the science of anatomy, as they respect dead and abhor dissecting human dead bodies. This is far from the truth In the following lines an attempt has been made to vindicate that charge. After going through the following lines, the readers will judge by the themselves, that what a fabicious lie it is. The muslims gave to the world, most valuable works on anatomy, throughly experimented and documented.

When Europe was shrouded in darkness--the period is called Dark--Age in the history of Europe—the muslims had already dug deep the knowledge of the past, expended it, explored new fields of knowledge, and without reservation forwarded it on to the future generation for further expansion.

To be little the achievements of *muslims* in the fields of anatomy, the west used tactful methods saying that the muslims were not permitted to dissect human dead bodies for they respect the deads, and for this reason, they did nothing in the fields of anatomy, what an innocent, plea, to misguide the general public. The muslims do respect the dead, but for the sake of knowledge to serve human beings and humanity, they will not shirk under the garb of an emotional belief. A muslim scientist will not hesitate to dissect even his own near and dear ones (to find knowledge) if he deems, if necessary in the best interest of his pursuit. An instance is on record in Islamic history that an eminant anatomist Ibne-Massiwah once said, " My son is a moron, as I am an intelligent. If the caliph had allowed me, I would have dissected him to find out the cause of his idiocy.

The anti-Islamic propagandists do not know the famous Hadith of the Holy Prophet (S.A.V.) which says, knowledge is of two kinds—the knowledge of religious and the knowledge of bodies":

العلم العلم الاديان و علم الابدان

How a nation, whose Prophets dictum, has been quoted above, can close the eyes to the knowledge of Anatomy? And how can they get the knowledge of Anatomy without dissecting the dead bodied? When on the science of religious hundreds of thousands of books have ben written by the muslims savents of all times how the other counter part—knowledge of bodies Anatomy-- could have escaped the penetrating eye of a muslims scholar? It is a lie, as will be seen in the following pages.

As was the case with other branches of science, Anatomy too was learnt by Arab scholar, from the Greak centres of learning. Hippocrates, Aristotle, Diocordes, and Galen, had already laid the foundation of the science of Anatomy, when muslim Arab entered in to field.

Aristotle had laid the foundation of comparative Anatomy by dissecting various animals and birds and similarly Galen laid the foundation of human Anatomy by dissecting human dead bodies.

A dissection of human bodies, which was simple to find out the cause by the disease of his moron son. He has written two books on Anatomy (1) kitab-ul-Tashreeh (2) kitab-ul-Janeen (on embryo).

Hunain Bin Ishaque (C. 800 A.D. 877).

He has written three books on Anatomy (1) kitab-Fil-Ayun (eye) (2) kitab-Fil-Tashreeh-Alatey—Ghiza (Alimentary canal) (3) kitab-ul-Buqrat-Fil-Mauleod (on embryo).

Abdul Hasan Thabit-bin-Qurah (826 or 827 A.D.—901 A.D.):

He has to his credit three books on Anatomy (1) Tawamey—kitabul-Aza-Ila Lahu-le-Jalenoos (galen on Anatomy of the womb) (2) kitab-Fil-Tashreeh Bazal Tayur (Dissection of some birds) (3) Risala-Fil-Takfinul-Mautava-Dafanahum.

These books, written by their respective authors cannot be the books of authority as they were, unless they have been substantiated by the actual facts of Anatomy, which can be learned only by dissecting the human deads bodies, and actually seeing the different organs with there respective positions and relationship with each others.

Zakaria or Razi or Rhazes (850—923 A.D.): He, in his Al-Mansoori, he has devoted a full chapter for Anatomy, where in he has minutely described the different organs of the body in great details.

He has a given a vivid descriptions of INVERTEBRAL—FORAMINA and spinal cord and has mentioned that through this Formina nerves, pass and supply adjoining organs with "sensory" and "motor" powers. The whole spinal cord emerges from the Medula oblongata through Foramina Magna. He rightly asserts that the damage of either the brain or the spinal cord will bring the paralysis to the part of the organ whose supply-nerve is damaged and crushed. Similarly he says that at the base of the skull there are multiple small pores through which Arteries and veins pass.

He has described for the first time the laryngal branch of the Recurrent nerve, which he says, arises near the trachea. He notes that these nerves are sometimes double on the right side and he also says that it is a congenital anomaly. This is true and absolutely a modern conception, though it was pointed out by A. R. Razi some centuries ago. A. R. Razi should be fully honoured for his discovery. He could not have found out this if he had not actually seen this anomoly. And the only way to study so minutely to discover something new is the dissection of human bodies.

Another anatomical discovery of A. R. Razi is ciliary muscles. Al-Haiza in his Tankī-hul-Manazir says "Ar-Razi in one of his books mentioned the pupillary reaction of the pupil of the eye (widening and narrowing of the pupils)" is because of small muscles and that these muscles come into play according to brightness of light or of darkness. In modern time the theory of accommodation of light is also based on this fact,—ciliary muscles contraction and expansion. Full credit should be given to Ar-Razi for his pointing out this anatomical fact and for discovery of ciliary muscless, centuries ago.

About the bones of the skull, he stressed that they are 23 in number which is very near to the present conception of 22 bones. Probably he has counted the first vertebra as a bone of the skull.

The following are the books written by Ar-Razi on Anatomy:

1. Kitab-ul-Haeyat-ul-Ayan. .. Structure of the eye
2. Kitab-Fi-Haeyat-ul-Kabat. .. .. Structure of the leve .
3. Kitab Fi-Haeyat-ul-Qalb. .. .. Structure of the heart.
4. Kitab-Fi-Haeyat-il-Aseeyeen .. Structure of the testicels.
5. Kitab-Fi-Haeyat-il-Samaq ... .. Structure of the ears.
6. Kitab-Fi-Haeyat-il-Mafasal ... .. Structure of arculation.

Abu Suhail Masechi (d. - —C. 1000 A.D.).

He was another great physician of tenth century who contributed to the knowledge of Anatomy. He has written a famous and voluminous books on medicine. Al-Kutub. Ul. Ma-fe-Sanaati-Tibbiya. Moete-Masechi. The third and the fourth books of this treatise deal with Anatomy. In the third book he described all those organs which are composed of similar calls, such as, bones, muscles, etc. and in the fourth book he dealt with the organs which are composed of composite cells such as brain, ear, eye, etc.

Abu-Suhail in his book pointed out that the heart is composed of muscular tissues which arise from the heart itself. Further he described the valves or the heart. This theory is recognised even today. Similarly about the Fat he says that is of two kinds, one he terms "Light" and the other "Thick". He notes that the light fat is found in between organs and helps as a support, and that with the diet rich in fat it does not much increase, while the thick fat is covered between muscles and fascio. It is quite thick and the diet rich in fat tends to increase this particular fat. This discovery is also maintained and substantiated by the modern Anatomists.

Abul Hasan Ali Abbas: (384 A. H.—994 A.D.):

He was the most brilliant celebrity in medical science of 11th century of Iraq. Ali abbas is famous for his medical compendium entitled. Kamaley—Snaa or Kitab-ul-Mulki.

Al-Mulki was first translated into Latin by constantinus Africanus under the name of Pentegi and later by Stephen of Antioch under the name of Liber Regious.

In his Kitab-ul-Mulki Ali Abbas has written on the Anatomy of different organs. His outstanding contribution to the knowledge of Anatomy is a discription of the Artries. He esserts that an Artery is composed of three layers (which he terms Jidar) outer layer, middle layer and inner layer (The present hostological conception of the Artery is the same—Dr. Tirmizi). Before Ali Abbas, it was considered that a—Artery is composed of only two layers. Ali Abbas asserts that the third layer is so fine that it escaped the attention of the Anatomist.

Abu Ali Sina (Abicenna) (980—1037 A.D.):

Another 11th Century giant of medical science was Abicenna of Iran. His Al-Qanoon is the golden treasury of medical knowledge. Anatomy too invited his scarching mind and analytic brain and he fully devoted his attention to the science of Anatomy. In his famous book Al-Qanoon he noted down many of his anatomical observations which are accepted true and correct even today. For Instance he observed that Aorta at its origin contains 3 valves which open when the blood rushes into it from the heart during contraction and close during relaxation of the heart so that the blood may not be poured back into the heart.

He asserts that it is because of nerves with which muscles are supplied that the muscles make movement and the perception of pain in the muscles is felt because of the nerves. Further he observes that the liver spleen and kidney do not themselves contain any nerve but nerves are embedded in the covering of these organs.

It is for the first time that he gave minute and vivedly graphic description of the different parts of the eye, like conjunctive sclera, cornea, choroid, Iris, Retina, Lens, aquous Humour, optic nerve and optic chicsama.

Similarly he has given detailed account of the Anatomy of other organs which like Abu Suhail Maseehi he divides into 2 parts, similar celled organs like bones and composite—celled organs like brain, ear etc.

Abnicenna in his canon, has condemned "conjenctures" and "presumptions" in Anatomy and emphatically demands that the physicians or surgeons should base their knowledge of Anatomy on actually seeing the organs by conducting operations and dissection on human bodies.

Abdul Latif—Baghdadi (1162—1231 A.D.).

A muslim scientist, Philosopher, physician and Zoologist was born in Baghdad and died in 1231 A.D.

He was appointed as a Professor at Al Azhar University, Cairo and hence during his stay in Egypt he discovered a great collection of skeletons which were accumulated during the pestilence on the hills of Maks. He examined those rejected skeletons and made correction of some of the Anatomical errors of galen, especially of mendible bone and sternum.

He wrote a book entitled " Al-Ifadiat-wal-Itibar-Fal-Amurul-Mushahidat-Wahawadis-Mivaninata Bil-Ardil-Mesar, " which was edited by Joeseph white (Oxford 1788 A.D.) and translated into French by S. Desacy, at Paris in 1810 A. D. M. S. copy of Baghdadis original book is preserved at Bodelion library (Oxford).

In the 13th Century Ibn Auf Massihi, a physician of repute also contributed to the knowledge of anaromy. He says that nerves are not like solid blacks but they are porous and the pores are so minute that they cannot be seen. (Kitabul Amda Fil Jarahat, published Adara Marif).

Later centuries saw eminent physicians like Alauddin Qarshi Mahmud Amli, Ali Hasan Jilani, Kutub Uddin Sherazi, Burhanuddin Nafis, Ismail Jurjani, and Mansur Bin Mohammad. All these have added some knowledge to our understanding of anatomy.

Allauddin Qarshi, Mohamed Amil, Ali Husain Jilani and Qutubuddin Sherazi have written commentaries and explanatory notes on Al-Qanoon of Aveeinna, in which they explained the anatomical terms in a simple and comprehensible language.

Jilani in his Sharah-e-Qanoon write " Frontal Suture sometimes extend to the forehead and divides its (Forehead) bones "

Nafis Burhanuddin :

He has written his valuable book Kitab-ul-Nafisi in which he has dealt with anatomy of the organ and the advantages which may be derived by the anatomical knowledge of the organ to determine the method of treatment either by medicine or by surgical interference. He has written a note on the dissection of brain and its components.

Ismail Jurjani.

He is an eminent physician, he has to his credit his famous book Zakhira Kharism Shahi, in which he has in detail described the anatomy of the different organs of the body.

Mansur Bin Mohammad Herati.

Another eminent physician of his time, he has written Tashreehe-Mansuri, in which along with the description of the anatomy of the organs he has given illustrative pictures of these organs covering minute details of Arterial supply, venous supply and nervous supply. M. S. copy of the book is in India Office Liberary, London.

Carl Rudolf, has incorporated these pictures in his " Studien Zur Geschichte, der medizen " which was published in 1907 A.D.

Dr. Ludwing in his " History and Bibliography of Anatomic Illustrations " has praised Mansur bin Mohamed for his beautiful and informative anatomical illustrations.

Dr. E. G. Brown has found 2 more copies of the book.

In some of the libraries of Europe, the anatomical illustrations of the muslims are preserved which we reproduce here. It can be easily surmized from these pictures that muslims knew very well the importance of illustrations in Anatomical treatises.

This is an established and universally accepted fact, that unless a surgeon is most thoroughly equipped with the knowledge of Anatomy in full detail, he cannot adhieve prominence in surgery. Now the west recognizes Abul Kasim al Zahrawi (d. 1013 A.D.) as the father of modern surgery and is ranked as an eminent surgeon of his time. How could be achieve this exalted position in surgery unless he had absorbed and assimilated knowledge of anatomy fully well in exhaustive detail. And we quote here the words of Al-Zahrawi himself. In his famous Al-Tasrif, for which the west is all for praise, he writes:

وينبغى احوا بها ان يرتاض قبل ذالک فى العلم التشريح الذى وضعه جالينوس حتى
يقف منافع الاعضاء و هيئا بها

(It is incumbent on the teachers, who want to practise surgery that he should learn anatomy, as propounded by Galen, so that they should know different structures (organs) and their functions. The person who emphatically recommends others to learn Anatomy, how can he neglect when he himself is, in the words of western scholars, an eminent surgeon.

During the zenith of the muslim empire, anatomy was a compulsory subject in the curriculum of the medical course and the dissection of human dead bodies was in vogue. It is because of the dissection that the Arabs were the first to discover 3 small bones of the inner ear, namely, Stapes کابی Mallius مطرتی and Uncus سندانی

At first the dissection was being carried out privately at the houses of the teachers. They procured the dead bodies of the persons who had no body to claim them. The authorities too connived at it and were lenient when complaints were lodged against the private dissection.

It was in the school of Salerno and later at the university of Bologna that official sanction was given for the dissection at school and at university. Dead bodies of condemned persons were sent to the teachers of the institutes for dissection.

Lastly we given below the arabic words for different organs with the western terminology. It will be seen that a number of terms have bee adopted in their original Arabic forms by the west and in some cases the have translated and used the equivalent of the Arabic words. This will sho how much the western world has borrowed from the Arabs in the field c Analogy.

In the following is the list of the Arabic words which the west hav adopted in into in English :

Western Terminology	Arabic Words	Arabic Words
Cephalic	Kifal	قيفال
Basilic	Baslik	باسليق
Sephenous	Safan	صافن
Mesentry	Masarika	ماساريكا
Peritoneum	Baratene	باراطين
Epidedmis	Aghadidus	اغديدوس
Aorta	Avarta	اورطيه
Pancreas	Bankras	بانقراس
Diapharm	Dayafergma	ديافراغما
Colon	Colon	قلون
Cornea	Carnea	قرنيه
Corn	Carn	قرن
Trochanter	Tracanter	طروخانطير
Menniges	Mennigies	مانيجيس

List of the Equivalent Words :

Arabic.		Meaning	Western Equivalent.
Ashna Ashari	اثناء عشيري	Twelve inches	Deudenum.
Mustaqeem	مستقيم	Straight	Rectum
Lafaifi	لفائفي	Knotted	Ileum
Ayur	اعيور	Blind	Caecum
Arooque	عروق	Vessels	Vessels
La-ism-Lahu	لا اسم له	The thing which has no name.	Innominate

In the preceding lines, we have tried to expose the indelible marks of the contributions of muslims to the science of anatomy and have shown that the west is indebted to muslims for their knowledge of anatomy.

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ISLAM AND SCIENCE

Since the advent of mankind, activity has been associated with human existence; it has enabled mankind to survive which, in turn, has made possible by the human desire and quest for knowledge. Knowledge has enabled man to control his surroundings and environment and thus has provided the impetus for the continued existence and advancement of humanity. All religions have therefore stressed the need for the acquisition of knowledge as an important element of human endeavour. With the passage of time, however, the progress and pursuit of knowledge reached a stage of stagnation and this was centuries before the advent of Islam. Scholars of the East and West had contented themselves with the study of established authorities and made no effort to discover the secrets of the Universe through independent inquiry. For the west, the three recognised authorities were, the Bible, the Church and Greek philosophers like Aristotle; the latter were considered to be the fountain head of all knowledge. The area of knowledge thus remained restricted while these three sources were regarded as adequate reservoirs of all knowledge.

Islam, while making it incumbent on the Muslims to acknowledge the authority of Allah and His Prophet Mohammad (Peace be upon Him) on matters of Islamic doctrine exhorted Muslims to seek knowledge and make a study of the Universe. The Holy Quran itself stresses the need for independent investigation, study and search instead of blind acceptance. Islam does not recognise any monopoly of knowledge as it existed in Europe and India where the priests and pundits held sway over the minds of men; Islam encourages every Muslim to indulge in the pursuit of knowledge for himself and deters him from accepting facts on someone else's authority. The Divine Creator has made everything in the Universe subservient to man, to be used and exploited in the service of God, and this serves as an incentive and a signal for research into the mainfold secrets and wonders of the universe. There are several commandments repeated in the Holy Quran which provide the necessary momentum and zeal for man in the pursuit of scientific study and research. One such commandment enjoins travel throughout the world in order to observe the fate of those who refused to believe in the supreme authority of God. [1] Another commandment obliges Muslims to strengthen themselves with weapons of force so that they are able to frighten the enemies of God and others beside them whom they know not and God knows them. [2] This is one of the most important commandments for the organisation and development of the Muslims' defence potential, and an incentive for creating new dimensions in research and development for strengthening the Armed Forces of Islam.

The frequent references to the natural phenomena of the universe in the Quranic verses such as the different stages of the moon, [3] the creation of everything according to a specific proportion, [4] the rotation of the sun and

the moon at a certain speed and according to a system, [5] and the creation of everything in paris [6] are by implication the incentives for scientific investigation.

The Quranic commands for prayers, fasting, *Hajj* (pilgrimage to Mecca) and *Jihad* also provide an impetus for scientific studies. The Muslims had to determine the direction of the Kaba to enable themselves to turn their faces towards it at the time of the prayers. This necessitated the determination of the altitude of the sun and the latitudes and longitudes of all places inhabited by Muslims.

Muslims were also obliged to travel extensively on land and see for performing Hajj, for waging Jihad, and for carrying on trade and commerce. These important activities aroused their interest in the preparation of the star maps which were necessary for their guidance in travel. The Hajj proved to be an important factor in the promotion of geographical studies. Before embarking on their pilgrimage to Mecca, the *Hujjaj* (pilgrims) usually collected all the necessary information on the territories lying on their way to the holy land of Hijaz. The literature thus produced included religious, social, political, historical, geographical, economic and agricultural studies on many countries.

The Islamic incentives for scientific pursuit created the spirit of independent inquiry among the Muslims. This led to a rejection of authoritarianism in scientific matters and as some statements in their scientific works show, the Muslims did not rely upon any authority in reaching scientific conclusions; on the other hand, they believed in the direct study of nature, obtaining much of their scientific knowledge from personal observation and experiments. Muslims accept the scientific conclusions of others only after making experimental verification; they feel no hesitation in pointing out the faults, if any, in the scientific conclusions of others, and making efforts to correct them on the basis of their own experience. A statement of Al-Biruni (d. 1045 A.C.) throws light on these points. At that time no departure was permissible from Aristotle's philosophy. The prevailing norms were such that nothing scientific was accepted, even though proved experimentally, if it differed from Aristotle's views. If any controversy arose in scientific matters, the final answer was searched out in Aristotle's treatise.

> I HAVE TRULY DONE WHAT EVERY one is bound to do in respect of any particular science, that is to accept gratefully the original contributions of his predecessors, to correct fearlessly the errors that come to his notice and to preserve what he himself discovers and leave it as a record for the future generations that are to follow him in time. [7]

Scientific knowledge is based on two important factors: observations (or experiments which are nothing but controlled observations) and inference. These two factors constitute the scientific method, which serves as a tool for

scientific investigation. Anyone who wishes to draw an inference needs to reflect over the observed facts. A great deal of emphasis is laid in the Holy Quran on the need for observing physical phenomena and natural processes, and reflecting on whatever is observed. Man has been commanded to observe whatever is visible in the heavens and on the earth. [8] He has been persuaded to look into the processes of the growth of food, [9] the flight of birds during which they expand and contract their wings, [10] the pouring of water during a rainfall [11] and so on.

In order to discover the truth, serious reflection over whatever is observed, is also essential. The significance of reflection has been stressed in the Holy Quran. A number of physical processes mentioned frequently in Quranic Veres have been characterised as signs of God for those who reflect. The expressions repeatedly used are "Why do they not ponder"? [12] "In them there are signs for those who reflect". [13]

Those who do not use their senses for observation and their minds for reflection have been compared to cattle: in fact they have been described even worse than them. [14]

In their quest for knowledge, and in order to discover the truth, the Muslims turned to whatever sources they could lay their lands on. In the introduction to his treatise on metaphysics, al-Kindi says:

> "We should not be ashamed to acknowledge truth and to assimilate it from whatever source it comes to us even if it is brought to us by former generations and foreign peoples. For him who seeks the truth there is nothing of higher value than truth itself; it never cheapens or bases him who reaches for it, but ennobles and honours him". [15]

So far as the physical or experimental sciences are concerned the people of pre-Islamic Arabic appeared to have some knowledge of them. With their keen sense of observation they observed natural phenomena and collected facts related to them. The names mentioned in the Pre-Islamic Arabic literature of various internal glands and external organs of the human and animal bodies suggest that they had a fair knowledge of anatomy. The Arabs had some knowledge of astronomy and meteorology as well; they knew something about the fixed stars, the movement of the planets and the changes of weather. Also known to them were a few arts and crafts such as horse breeding and camel rearing. [16]

Some knowledge of Astronomy and Mathematics was derived from India as well as from the Greeks who had themselves learned their ancient science from the Babylonians; we all know that the Babylonians had migrated from Arabia to Mesopotamia. In other words the ancient science thus borrowed and acquired by the Arabs from Greece was a stream flowing out of their own reservoir of knowledge which had inundated the Babylonians and later the Greeks. [17]

The Greeks had imported their knowledge of astronomy and mathematics from abroad, and Greek culture therefore could not fully absorb these sciences. They undoubtedly systematized these sciences, and made generalizations. They evolved theories on the basis of superficial observation under natural conditions but looked down upon experimentation. Manual work was supposed to be done by ignobles and slaves and not by the elites. The Greek philosopher, Aristotle, for example, wrote a book on physics, but he did not undertake even a single experiment. However, the Greeks were aware of experimentation, and some scientists like Archimedes did perform experiments as well. [18]

On the contrary, Muslims, who had been encouraged to make direct observation, to reflect and to draw inferences, expounded their theories on the basis of experimental work. Their constant effort to seek the truth led them to develop the scientific method. As mentioned before, the enquiry into nature, in its simplest form, can be defined as drawing inferences from observation. Muslim scientists brought about a fusion of the practical approach to scientific problems with abstract thought. The fact that Muslim scientists attached great importance to the practical aspects of science is evident from the great advances made by them in chemical techniques and the heavy growth of industrial process pharmacy and chemistry. They made progress on the practical side in the laboratory as well as explored the theory of chemical processes and reactions. The labelled diagrams of experimental apparatus, the elaborate description of the experimental techniques and procedure, the theoretical discussions of the chemical reactions and the preparation and properties of chemical substances found in their books confirm this thesis.

The Muslims studied particular facts on the basis of experiments and derived inferences in the form of general principles or scientific laws. In other words they employed the inductive method. For instance, Ibn al-Haitham studied the course of the rays of different types of light reflected by different types of mirrors and with different angles of incidence and thus was able to evolve the second law of reflection. [19]

Muslim scientists recognised the physical or qualitative, and mathematical or quantitative aspects. [20] The physical science they made quantitative from the quantitative study of numerous scientific problems. Detailed and long observations, patient investigation and examination, the procurement of positive knowledge and the urge for experimentation are all the pre-requisites of scientific research for which Muslim scientists were adequately oriented.

Since scientific observations carried out with the help of inaccurate instruments cannot lead to correct results, Muslims paid great attention to the accuracy of their instruments; the old instruments were improved and some new ones were invented. The instruments of those days were far better and more accurate than those of the earlier Greeks, and those manufactured in the famous Nuremburg factory in the fifteenth century. [21] The makers of good instruments were

highly esteemed. Hamid and Ali Ibn 'Isa were compared by a famous astronomer, Ibn Yonnus, to Galen and Ptolemy. This shows how much importance the Muslims attached to good instruments. [22] To ensure utmost accuracy in observation and calculation, valuable records were signed in the presence of the Judges. [23]

Scientific observations are sometimes tedious; by their very nature they require a long period of time to complete them. This is because firstly, they have to be repeated for verification and elimination of errors, if any; secondly certain observations are of a nature that they cannot be finished before a certain minimum time has elapsed. For instance, when ordered by Hulagu to prepare the astronomical tables, Nasir al-Din Tusi requested that he may be allowed to work for thirty years which was the shortest time during which the planetary cycles were completed. [24] The astronomical observations of Muslim scientists sometimes extended over fifty years or more. [25]

The Muslim scientists made an original contribution not only to science but also technology. In other words, they made a practical use of their scientific discoveries. They observed the stars and prepared star maps for navigational purposes. [26] Ibn Yunus made use of the pendulum for the measurement of time. [27] Ibn Sina used air thermometer to find out air temperature. [28] Paper compass, gun and gunpowder, inorganic acids and alkali represent some of the most important examples of scientific and technological achievements of the Muslim scientists which brought about an unprecedented revolution in civilization. [29]

Muslim scientists made algebra a permanent branch of mathematics through their efforts. The word "algebra" used in the languages of the world has its root in Arabic. The Muslims also developed plane and spherical trignometry and applied it to astronomy. By developing algebra to the solution of fourth degree equations and using since and tangent instead of the chord of the earlier Greeks, they made an enormous addition to the human power of investigation. Chemistry was made into an exact science; Optics and Opthalmology were highly developed. By developing the medical treatment of animals, Muslims made it a permanent branch of science, which was given the name of Baytarah after the name of its founder, Ibn Baytar. This word has been corrupted into 'veterinary' in English. Muslim scientists also separated astrology from astronomy, because a belief in the influence of starts on the fate of human beings is heresy in Islam. Astronomy was developed to the stage of a pure science after its purification from superstitious beliefs. Razi applied chemical knowledge to the preparation of medicine and thus became the founder of Iatrochemistry. The Muslims developed other branches of science also to a great degree and made many discoveries and inventions which cannot be mentioned in this brief discussion.

The works of these scholars were widely studied not only in the Muslim world but also in Europe, mostly through the Latin medium. From the eleventh century knowledge of science and medicine began to be transmitted, mostly through Latin translations, from the Muslim world to Europe. At that time, except at Salerno near Naples where in a medical school some traces of Greek medicine were found, the general level of medical knowledge in Europe was quite low. Charles Singer describes it in the following words:—

> "Anatomy and Physiology perished. Prognosis was reduced to an absurd rule of thumb, botany became a drug list. Superstitious practices crept in medicine which deteriorated into a collection of formulae, punctured by incantations. The scientific stream, which is its life blood was dried up at its sources."

In 1085 A.D. Toledo, the greatest centre of Muslim learning in the West, fell into the possession of the Spanish Christians. Students from different parts of Europe used to come there for the study of Islamic Science. Archbishop Raymond founded an academy where the medical, philosophical, astronomical, astrological, mathematical and other works were translated. The translators and teachers were Muslims and Jews who knew Arabic, Hebrew, Spanish and Latin.

Sicily which had been under Muslim control for 130 years fell in 1091 A.D. into the possession of Normans. Here also Greek and Arabic works were translated into Latin. All the kings from Roger I to Frederick II, to Manfred and Charles I patronised learning, and thus Sicily proved to be a great centre for the transmission of Muslim scientific knowledge to the Europeans.

The role of the Crusades in the dissemination of Muslim sciences in Europe was not considerable. It was, however, reflected in the foundation of hospitals on the Muslim pattern throughout Europe in the thirteenth century.

The most important scholars, generally responsible for the spread of Muslim sciences among Europeans, were Constantine the African, Adelard of Bath, Petrus Alphonsi, Gerard of Gremona, Mark, Raymond Lull, Roger Bacon, Berengar of Valencia and Arnold of Villanove. Although the Latin versions of Constantine were not of a high standard, yet they caused the introduction of science into Medieval Europe where a few traces of knowledge existed. Petrus Alphonsin was the first to spread the scientific knowledge of Muslims in England. He was a Spanish Jew who went to England where he became a physician to king Henry.

The numerous Arabic words and scientific terms currently being used in European languages are living monuments of Islam's contribution to modern sciences. Besides the large number of books in the libraries of Asia and Europe, scientific instruments have been preserved in the museums of many countries. The mosques and big palaces built centuries ago also bear eloquent testimony to this important phenomenon of world history.

It will be interesting to note a few Arabic words and terms which are currently used in some European languages. The terms ciphra cypher and chiffre in Latin, English and French languages respectively have been derived from the Arabic word *Sifar* (meaning empty or nil). *Sifar* is a number written at the right of another number to increase its value ten times. Until the end of the seventeenth century the word *chiffre* in French was used in the same sense, but gradually it became the name of the whole subject dealing with numbers *i.e.* arithmetic. The English word cypher is used for *sifar* (zero) in some particular sense. The term Algebra, for a particular branch of mathematics, is of Arabic origin. The term Alkali in chemical terminology used for that particular substance which, when combined with an acid, gives a salt, is the modified form of the Arabic word *alcali*.

The names of the planets, aljedi, Alakreh etc. are also of Arabic origin. The Arabic words are al-Jadi and al-aqrab respectively.

The French word *Escadre* and the English word Squadron used in the armed forces, have been derived from the Arabic word 'askariyyah' used in the same sense.

In the process of translation the names of a large number of Muslim scholars have also been altered with the result that the readers sometimes think that they are the names of non-Muslim Europeans. Some such names are quoted below :—

Arabic Name	Latin Name
1. Abu'l-Qasim al-Zahrawi	Albucasis.
2. Jabir Ibn Sinan al-Battani	Albatinius
3. Abu 'Ali Ibn Sina	Avicenna.
4. Muhammad Ibn Zakariyya al-Razi	Rahazes.
5. Ibn Rushd	Averroes etc.

Some scientific works of the Muslims were thoroughly studied for centuries in western academic institutions and they exerted great influence on western thought. These include Kitab al-Qanun by Ibn Sina, Kitab al-Manazir by Ibn al-Haitham and Kitab al-Tasreef by al-Zahrawi. Till the 18th century A.D. the books on various sciences taught in the academic institutions of the West were generally the translations of Arabic works.

This brief narration is designed to bring to light the role of Islam in the evolution of science and the immortal contribution of Muslims to the development of science. The purpose is to create an awareness among Muslims that knowledge of science is not racial or regional but belongs to those who seek

it with sustained and dedicated hard work, and who observe and record whatever is experienced. The Muslims must rid themselves of the inferiority complex resulting from a lack of knowledge of the achievements of their ancestors. These achievements should prove to be a source of pride and confidence in their own glorious past and heritage and an incentive for further progress. A proper study of the philosophy of science is also necessary at University level.

It is imperative that the Muslims should evince a more positive and active interest in science, with a zeal and enthusiasm equal to that of their ancestors, who had laid down, improved upon and enunciated new theories and avenues of research and study so that they could be enriched with the experiences and models of the past. Only thus could the Muslims build up a future of hope and happiness, prosperity, goodwill and harmony for world and mankind.

"BISMILLAHIRRAHMANNIRRAHIM"

THE ISLAMIC CONCEPT OF MODERNIZATION AND THE USE OF SCIENCE AND SCIENTIFIC CONCEPTS

SECTION I.—THE RELATIONSHIP BETWEEN KNOWLEDGE AND THE ISLAMIC REVELATION.

The guiding principle of Muslims is to believe in the one-ness of God (Allah) and in the guidance provided by him for mankind. This guidance is provided in the revealed books and, in its final form, in the Quran, which claims to be a book of social and moral guidance, but draws a great deal of its strength from reference to God's creations existing in various forms in the world around us. Repeatedly, we are called to look around us, to observe, to ponder over the works of God. and to reflect on the history of nations gone by. Thus *e.g.* " Lo ! In the creation of the heavens and the earth and (in) the difference of night and day are signs for men of understanding such as remember Allah, standing, sitting and reclining, and consider the creation of the heavens and the earth. Our Lord : Thou did not create this in vain " (Surah 3 : 190) 1(a) and " And Lo: in the cattle there is a lesson for you. We give you to drink of that which is in their bellies, from betwixt the refuse and the blood, pure milk palatable to the drinkers. And of the fruits of the date-palm, and grapes, whence ye derive strong drink and (also) good nourishment. Lo ! therein, is indeed a portent for————————" (Surah 16 : 66-67). 1(b)

This lays the logical foundation for the Muslims' belief that the Quran contains guidance for every phase of human activity. This guidance is supplemented by the explanations provided by the Prophet, (Sallallaho alaihe wa sallam) and we are told to emulate his example,[2] *viz* " If you love Allah then follow me, Allah will hold you dear " (Surah Aal-ɔ-imran) :— قل ان كنتم تحبون الله فاتبعونى يحببكم الله of course, everything in the universe is there for man to make use of[3], *viz.* " *See* ye not how Allah hath made subservient (serviceable) unto you whatever is in the skies and whatsoever is in the earth and showered on you His blessings, both manifest and hidden " (Surah 31 : 20). The proviso is that man should use these in accordance with the guiding rules given by Allah and his Prophet Muhammad.

Under the impetus provided by these teachings, the Muslims not only spread Islam far and wide, but they developed the arts and the sciences in a systematic manner, at least during the first six centuries Hijri, so that their centres of learning became renowned all over the world and were the acknowledged leaders in learning and science until the Renaissance in Europe. To quote from a recent publication[4] "The Bible, the Qur'an and Science" by Maurice Bucaille :—

> "The relationship between the Qur'an and science is a priori a surprise, especially when it turns out to be one of harmony and not of discord. A confrontation between a religious book and the secular ideas proclaimed

by science is perhaps, in the eyes of many people today, something of a paradox The majority to today's scientists, with a small number of exceptions of course, are indeed bound up in materialist theories, and have only indifference or contempt for religious questions which they often consider to be founded on legend. In the West moreover, when science and religion are discussed, people are quite willing to mention Judaism and Christianity among the religious referred to, but they hardly every think of Islam. So many false judgements based on inaccurate ideas have indeed been made about it, that today it is very difficult to form an exact notion of the reality of Islam.............

"The relationship between religions and science has not always been the same in any one place or time. It is a fact that there is no writin g belonging to a monotheistic religion that condemns science. In practise however, it must be admitted that scientists have had great difficulties with the religious authorities of certain creeds. For many centuries, in the Christian world, scientific development was opposed by the authorities in question, on their own initiative and without reference to the authentic Scriptures. We already know the measures taken against those who sought to enlarge science, measures which often made scientists go into exile to avoid being burnt at the stake, unless they recanted, changed their attitude and begged for pardon. The case of Galileo is always cited in this context : he was tried for having accepted the discoveries made by Copernicus on the rotation of the Earth. Galileo was condemned as the result of a mistaken interpretation of the Bible, since not a single Scripture could reasonably be brought against him.

"In the case of Islam, the attitude towards science was, generally speaking, quite different. Nothing could be clearer than the famous Hadith of the Prophet : "Seek for science, even in China", or the other hadith which says that the search for knowledge is a strict duty for every Muslim man and woman. As we shall *see* further on (in section), another crucial fact is that the Qur'an, while inviting us to cultivate science, itself contains many observations on natural phenomena and includes explanatory details which are seen to be in total agreement with modern scientific data. There is no equal to this in the Judeo-Christian Revelation. It would nevertheless be wrong to imagine that, in the history of Islam, certain believers had never harboured a different attitude towards science. It is a fact that, at certain periods, the obligation to educate oneself and others was rather neglected."........

In order to trace the changing attitudes, it is worthwhile to first make a brief analysis of the growth of knowledge and learning in the Muslim world during the first five centuries Hijri and then trace its course onto recent times. This would serve as a back-drop against which the problems of modernization can be studied critically.

SECTION 2.—KNOWLEDGE AND LEARNING IN THE FIRST FOUR CENTURIES OF ISLAM.

The basis of Islam being the admission that there is but one God and that Mohammad (peace be upon him) is his apostle and prophet, it implies that a Muslim thoughts and actions are to be modelled on those of Mohammad. Accordingly, we find that in the first century of the Hijri, every single one of the Sahabah and the vast majority of those who followed them (*i.e.* Taba'een) participated in the three essential activities of the time, namely religious observances, learning, preaching and adoption of Islam (Tabligh), and journeying far and wide for the spread of Islam (Jehad), which occasionally culminated in what is correctly known as Qital or Holy War. This period of intense living with involvement of Islamic theme produced the phenomenal expansion of the boundaries of Islam in the East and (to some extent) in the West.

This expansion naturally produced two results, *viz.* a good part of the attention was turned towards (a) establishing the Islamic way of life among the newly acquired nations, and (b) developing an exchange of information with other countries, as a result of which a great many philosophical and scientific works of Greek, Persian and Middle Eastern origin were studies and translated into Arabic, mostly during the 2nd and 3rd centuries of the Hijra. At the same time, we find the muslims turning their creative energies that were previously being utilized in tabligh (*i.e.* the spread of Islam) towards the development of the existin g mass of knowledge and the creation of some entirely new facets of scientific and intellectual activities. They first tried to acquaint themselves with the (scientific) discoveries of various nations—before them. In the next stage, having attained a measure of relief from the arduous task of spreading and establishing Islam in the new territories, they (keeping in view the Quranic precepts to observe nature) turned their attention to the direct observation of nature, and then attempted to synthesize their results into a systematic explanation or theory.

This period, the first half of which (about 750—1000 A.D.) is sometimes referred to as the " Golden Age " of Islam, can be characterised by two broad features *viz.* a growing placidity in the activities of " Tabligh " or Islamization, and a corresponding increase in the philosophical, intellectual and scientific exercise of the mind. Accordingly, the 2nd, 3rd and 4th century Hijri contain extensive records of such activities, including such outstanding personalities as Jabir Ibne Hayan (C. 780 A.D.) Alkindi (d, 873), Al-Khwarzimi 780 to 870), the three Banu Musa (ibne Shakir) Al-Razi (860 to 925), Alfarabi (d, 951), Ibnul Haithame (965 to 1039), Alberuni (973 to 1048) and Bu-Ali Sina (980 to 1037 A.D.). These persons contributed new ideas, new techniques and new methods of attack in the fields of science, mathematics and Technology, but all are known to possess one characteristic in common with each other that has rearely been remarked upon. I refer here to the fact that all of them were not only outstanding intellectuals, but were well versed in Islamic religion, and a majority of them were in fact mystics of a sort. An examination of the list of their works shows that they were prolific, with an

amazing diversity of interests that arose out of some deep motivation. The conclusion that can be drawn is that the important place occupied by 'Tabligh' and 'Jehad' during the first two centuries was gradually taken up by academic pursuits and intellectual innovation in the 3rd and 4th centuries. Thus, while the sciences and the arts were being given a significant push, the basic Islamic effort may perhaps be considered already to have reached its zenith, and have taken a changing direction from being an outword (or extrovert) concept into an inward-looking concept, with increasing emphasis on studies and philosophical considerations. With regard to these, we may again quote [6] :—

> " A very great number of ancient manuscripts have come down to us thanks to cultivated Arabs who acted as the vehicles for the Culture of the conquered countries. We are indebted to Arabic culture for mathematics (algebra was an arabic invention), astronomy physics (optics), geology, botany, medicine (Avicenna), etc. For the very first time, science took on an international character in the Islamic universities of the Middle Ages (1100—1500 A.D.). At this time, men were more steeped in the religious spirit than they are today ; *but in the Islamic world, this did not prevent them from being both believers and scientists. Science was the twin of religion and it should never have ceased to be so.*
>
> " A knowledge of the Islamic Revelation is indeed fundamental from this point of view. Unfortunately, passages from the Qur'an especially those relating to scientific data, are badly translated and interpreted, so that a scientist has every right to make criticisms—with apparent justification—that the Book does not actually deserve at all. This detail is worth nothing henceforth : in accuracies in translation or erroneous commentaries (the one is often associated with the other), which would not have surprised anybody one or two centuries ago offend today's scientists. When faced with a badly translated phrase containing a scientifically unacceptable statement, the scientist is prevented from taking the phrase into serious consideration.
>
> " Why do such errors in translation exist? They may be explained by the fact that *modern translators often take up, rather uncritically, the interpretations given by older commentators.* In their day, the latter had an excuse for having given an inappropriate definition to an Arabic word containing several possible meanings ; they could not possibly have understood the real sense of the word or phrase which has only become clear in the present day thanks to scientific knowledge. In other words, the problem is raised of the necessary revision of translations and commentaries. It was not possible to do this at a certain period in the past, *but now-a-days we have knowledge that enables us to render their true sense.* These problems of translation are not present for the texts of the Judeo-Christian Revelation : the case described here is absolutely unique to the Qur'an."

Here it is also important to note that at the time of the coming of Mohammad (peace be upon him), intellectual activities in most parts of the world had been reduced to stagnation, so much so that, in some parts of Europe, the [illegible]

were proud of their ignorance, and it was normal to accept ideas and even incorrect facts of observation on the authority of others. The teachings of Islam put forth by Muhammad (peace be upon him) on the one hand taught an unquestioning belief in the laws and rules of conduct given by God and Mohammad (peace be upon him), as against rules made on the authority of man, and at the same time repeatedly admonished the muslims to look around them in the universe and travel in the world, so as to observe the wonderful signs of Allah's supremacy and power in all things created, whether they be small or big. Thus, we find that in the first four centuries of the ijri there was never any confli t between religious observances and the carrying out of scientific observation and studies of nature or the propagation of laws found therefrom, which constituted what later came to be called Natural Philosophy in Europe.

SECTION 3.—ISLAMIC THOUGHT FROM THE 5TH CENTURY HIJRI ONWARDS.

To the Arabs, philosophy was the true cause of things in so far as it is possible to ascertain them by various human faculties. The harmonization of Greek philosophy with Islam begun by al-Kindi was continued by al-Farabi and Ibn Sina (980—1037 A.D.). This process may be said to have reached its crucial stage with al-Ghazzali (d. 1111 A. D.) whose works represents and turning point in the history of Islamic thought, and practically coincides with the founding of the Nizamiyah Academy. To quote from Phillip Hitti's History of the Arabs[7] :—

> " It was about this time that the first real academy in Islam, which made provision for the physical needs of its students and became a model fo later institutions of higher learning—the Nizamiyah—was founded in 1065—67 A.D. by the enlightened Nizam-al-Mulk, the Persian Vazir of the Saljuq Sultans Alp Arsalan and Malikshah and the patron of Umar-al-Khayyam............ The Nizamiyah was consecrated as a madrash (theological seminary), particularly for the study of the Shafi' rite and the orthodox Ash' ari system. In it the Koran and old poetry formed the backbone of the study of the humanities (ibn-al-adab) precisely as the classics did later in the European universities ".

> " It was in this Nizamiyah that al-Ghazzali lectured for four years (1091—95). In the chapter on learning with which he introduced his ' Ihya ', al-Ghazzali combated the idea that the imparting of knowledge was the object of education and emphasized the necessity of stimulating the moral consciousness of the student, thus becoming the first author in Islam to bring the problem of education into organic relation with a profound ethical system............... Al-Nizamiyah survived the catastrophe that befell the capital at its capture by Hulagu in 1258, as it survived the later invasions by the Tartars, and was finally merged with its younger sister, al-Mustansiriyah, about two years after Timur Lang captured Baghdad in 1393 "...................In all these higher institutions of theology, the science of tradition lay at the basis of the curriculum, and memory work was especially stressed ".[7]

During the later half of the age of the Abbasis, (approx. 1000—1250 A. D.) one can notice a distinct change in the stance of the intellectuals, whether scientist or philosopher. At first a subtle change, which gradually becomes quite obvious, it can be typified by noting that the important place of observation of natural phenomena and geveralizations therefrom was gradually taken up by the emphasis on logical deductions from some (often obscure) premises, possibly existing in the philosophies of the older savants. This was paralleled by a corresponding change of emphasis in the interpretation of Islam, from an active dynamic life based on active observations and 'Tabligh' towards an inward looking and static interpretation based on a forced mixture of the inuflence of Greek and Persian philosophy with the original Islamic theology. This scholastic theology or علم الكلام developed largely as a result of misplaced attempts to defend Islam through the methods of Greek logic. Looked at in this way, the decline of scientific activity in the later half of the Abbasid period does *not* appear as a *consequence* of the pronouncement of Imam Al-Ghazzali (d. 1111 A.D.) and his school, but both these can infect be traced to the increasing and unhealthy influence of Greek and Persian philosophy on the original active and outward-directed concepts of Islam.

Every society tends to fix a set of priorities for itself and to give a higher degree of importance to certain pursuits and activities at the expense of others that are considered less important and less useful.

In the early centuries of Islam, useful and desirable knowledge was that which aided man in determining his place and function in the universe, so that an educated person could lead a full, fruitful and satisfied life that bore a conscious relationship with the concept of a life and judgement after his death. This particular concept of useful knowledge remained operative for many centuries in various Muslim countries and later even in the newly-awakened Western countries, who constituted the leaders of post-renaissance Europe. As a matter of fact, man's scientific researches and endeavours, and ultimately the rapid strikes taken in science and technology during the nineteenth century, stem largely from this very concept. Allah has ordained that we should think carefully and critically about the heavens and the earth, in which there are signs for the thoughtful and these signs do *not only* guide us towards a closer consciousness of the creator, but at the same time provide a key to the enormous treasures of knowledge and energy looked within the universe. In the earlier phases of scientific discovery and advancement, these two aspects of research went hand-in-hand, and indeed strengthened each other.

SECTION 4.—OUR PRESENT-DAY DILEMMA

Science and technology today is a powerful instrument that helps us to increase our knowledge of things around us, and in this capacity it has an impressive record of achievement. The social impact of these achievements, has, however, been invariably vitiated by one fatal error or shortcoming, namely the Western tendency to install science as a God (or even the supreme God) by declaring that science

alone has the right to direct the physical and mental life of man. By doing this, the West limits the scope of man's inherent capacities which may, and in fact do, go beyond the present-day boundaries of the various empirical and theoretical branches of science. This unfortunate turning point in human and scientific philosophy will bear a somewhat closer examination. Every branch of science begins by defining its scope, and *purposely* excludes all the phenomena that are outside it. In the same way, the so-called totality of experimental sciences excludes, and *should* therefore *be silent about* all those phenomena that are *not* subject to *their* techniques of experimentation. It is precisely at this boundary that the social sciences, ethics and ultimately religion come in. In fact, one may go so far as to say that the social sciences are, broadly speaking, the region of overlap between science on the one hand, and Religion or Applied Philosophy on the other.

Some protagonists of science claim that science alone can introduce man to the secrets of this universe and of life, and therefore only that which is upheld by science is true. In this, they over-look the facts that the theories of science change from decade to decade, and they *apparently deny* that man can have any perception beyond that of his sensory organs. This denial of course is based largely on lack of investigation of such perceptions, which some-how are intimately connected with the fabric of social existence ; it has never been easy to understand the telepathic communication between some human beings nor to deny that God has created this universe and placed man in it. To quote from Dr. Mohd Iqbal's famous Allahabad (1930) address to the All-India Muslim League :—

> " Islam does not bifurcate the unity of man into an irreconcilable duality of spirit and matter. In Islam, God and the universe, spirit and matter, Church and state, are organic to each other. Man is not the citizen of a profane world to be renounced in the interest of a world of spirit situated elsewhere. To Islam, matter is spirit realising itself in space and time.............. "

> " Muslim society, with its remarkable homogeneity and inner unity, has grown to be what it is under the pressure of laws and institutions associated with the culture of Islam. The ideas set free by European political thinking, however, are now rapidly changing the outlook of the present generation of Muslims................ In Europe, Christianity was understood to be a purely monastic order, which gradually developed into a vast church organization. The protest of Luther was directed against the church-organization, not against any system of polity of a secular nature, for the obvious reason that there was no such polity associated with Christianity.............Prof. Vensink of Leiden wrote to me the other day : ' It seems to me that Islam is entering upon a crisis through which Christianity has been passing for more than a century. The great difficulty is how to save the foundation of religion when many antiquated notions have to be given up. It seems scarcely possible to state what the outcome will be................ '".

Again Iqbal says : "Islam has furnished those basic emotions and loyalties which gradually unify scattered individuals and groups, and finally transform them into a well-defined people, possessing a moral consciousness of their own............" Of course, man has been given certain capabilities that enable him to subjugate most of the things around him and put them to him use, whether it (would) be a good and noble use, or a bad, destructive, and ignoble one. Herein lies the basic problem of today ; namely, how to induce men to use their faculties in essentially noble, constructive, and useful directions. It may perhaps be simple to motivate isolated individuals correctly, but the real test is to actuate a *large collection of men* in a truly constructive and nable direction ; and Islamic thought and ideology provides us with such a motivation. One is faced with the problem of interplay of a few orienting or motivational forces with a large number of disturbing interaction and forces, which tend to produce disorder and chaos. The balance between these two will determine the ultimate course of the system.

It should of course be remembered that technology is not contrary to human values. To quote from Melvin Krausberg [9] : "I do not believe that technology is contrary to human values, because technology is a very human activity. Indeed, according to the anthrolpologists, what helped change us, really, from almost-man to man was technology : man made tools, but tools also made man. We now realize that we could not have become home sapiens—at the same time. So technology, far from being anti-human, is a very, very human activity, and indeed, according to our authropologists and biologists and psychologists, it is one of the earliest of man's cultural characteristics. It helped man become man."

He further comments : "Nowadays, there are certain dull, routine, stupefying tasks which the machine continues to take over. The old assembly line is no longer what it used to be. The workers, for one thing, move around from one job to another. Many of the hard tasks have been taken over by machines, and so the worker gets new satisfactions. Then, lots of things which we used to call 'white-collar' tasks—office clerical tasks, and these are boring and routine and stultifying to the human mind—these are being taken over by computers".

SECTION 5 :—ROLE OF THE SCIENTIST IN ISLAMIC SOCIETY

Thus technology when properly applied can give man more opportunities for development as a human being. One may venture to guess-that, as the developing Muslim countries become more and conscious of scientific soundness of their cultural heritage, so will they develop technological self-reliance as a more or less natural consequence. This, coupled with a properly integrated strategy of technical education and cultural motivation, can provide the intellectual and technical environment necessary for major scientific and technological progress of these nations. Of course the application of science and technology does not automaticaly

benefit all groups in a nation equally, and disparties in standards of living can be accentrated by unbalanced technological development. The basic concepts of Appropriate Technology should be adopted to ensure that the application of S & T will benefit all sections of the people in a fair and equitable manner.

Whatever technological help is today being given by the highly industrialized world to the less developed countries is on terms that generally involve not only high economic and social costs, but also perpetual of the more sophisticated technologies. The so-called "Third-World" countries are paying heavily for import of technology without in most cases being provided the detailed know-how. This makes it impossible for them to engage effectively in reproduction or adaptation of the imported technology. For example, the direct cost to Pakistan is over Rs. 1,600 million annually for patents, licences and imported technical services alone, apart from heavy indirect costs on import of machinery and similar hardware. The dependent nations continue to accept all sorts of invidious conditions, because the power of modern technology to transform the nature and orientation of development is such that it must necessarily be secured, no matter how harsh the terms of transfer may be, And this process is repeated year after year, as new sophisticated technologies are put forth by the developed countries.

In order to be able to stand on our own feet and not undermine further our independence of thought and action, we must mobilize our own resources in men and materials with courage in both hands, and remember that God never helps those who do not help themselves. It is also not without reason that Allah has made man his vicegerent on earth, and endowed him with the capacity and thirst for knowledge. One of the unfortunate facts of the impingement of Western administration and culture on Muslim countries has been the steady erosion of the age-old traditions of the intellectual as well as the respect accorded to the learned man or the intellectual seeker after knowledge. This has, to some extent, been replaced in today's society by a growing realization of the importance of the engineers, technologists and physicians. However, the scientist who sets out to enquire into the basic causes of phenomena or sets out to find real improvements in the ways of doing things is today considered in our Islamic countries as an expensive luxuty —a person not really necessary at the moment. This is doubly unfortunate because of the heavy drain on the resources of the Muslim countries caused by the high expenditures on the transfer of technologies of various degrees of sophistication, in the hope that this would give speedy development of the indigenous infrastructure and skills. Without giving scientific enquiry an adequate place in the overall developmental programme and in the executive decision-making process, it seems highly unlikely that these can be shifted in the near future towards systems based on self-reliance, which ultimately requires deep knowledge of the various disciplines of science and technology together with decision—making capabilities and moral strength for independent far-sighted decisions.

The role of the scientist in an Islamic society is thus a three-fold one. First and foremost, he must endeavour to make people accept the pursuit of science as an essential part of human activity,* and *not* as a foreign body injected into the Islamic society. Secondly, suitable motivation and an attitude of mind has to be developed wherein science will be used in a beneficient fashion, *i.e.* for the benefit of all the people and without degradation of the environment and the non-renewable resources. Such concerns were well-known (on the basis of Khilafat-e-Ilahiah) to many earlier Muslim savants. Thirdly, the scientific concepts have indeed to be considered in the context of what the Quran and the Prophet (sallallaho alaihe wa sallam) said about nature, but do *not* necessarily have to be in line with the interpretations put forth in the 5th century Hijri or thereafter, many of which were coloured by the dead-weight of foreign Greek or Persian philosophy. In this context, we may cite as a typical example the case of the " Seven Skies ".

The author has shown in an earlier paper [10] that the presently observed sizes of various physical entities *viz.* the earth, the solar system, the nearest fixed stars, the galaxy, etc. are very nearly in a geometric progression with a factor of about 20,000 each, of Fig. 1, which is in accordance with the explanation of the سبع سموات given by the Prophet (sallallaho alaihe wa sallam) to the Sahaba as a series of concentric shells with a definite size ratio, but in later centuries the Muslim commentators erroneously adopted the Greek philosophers' view identifying these سبع سموات with the 7 planets. This error persists in a lot of religious literature even today and needs to be rectified.

As Muslims, we must draw our ultimate strength and motivation from the Quran and the Prophets, sayings. Motivation of a society involves the aspirations and interactions of a large collection of individuals, each of whom continues to retain his individuality while participating in the collective effort. In order to study this process with some objectivity and at least semi-quantitative exactness, it is worthwhile examining some physical phenomena that are comparable in nature. Clearly, the field of thermodynamics and statistical mechanics offers several examples of the interplay of external and internal forces of an assemblage of large numbers of bodies, which may be atoms, molecules, or larger bodies of matter. Laws similar in form to those of thermodynamics have been found [11] to be operative in the field of transfer of technology, especially the second law, viz.

$$\neg \text{ (Technology) } \gtrsim 0$$

which tells us that, through technology transfer alone, the technology gap cannot be diminished. Even a currory exanimation of the socio-economic history of nations serves to demonstrate [12] that moral and intellectual revitalization precedes economic and technological resurgence.

*Thus the word " علوم " includes Knowledge of all the sciences, as against the crafts ([illegible]) or technologies.

Fig 2

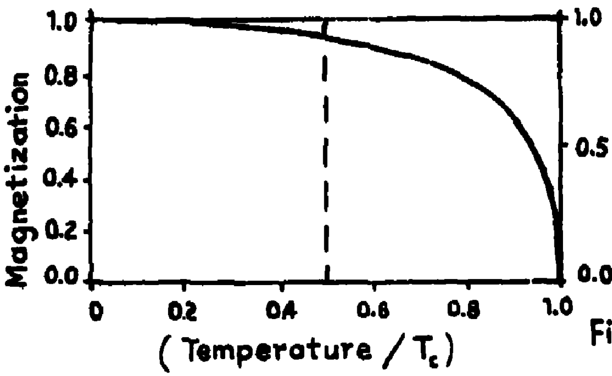


Fig.

ig. 1

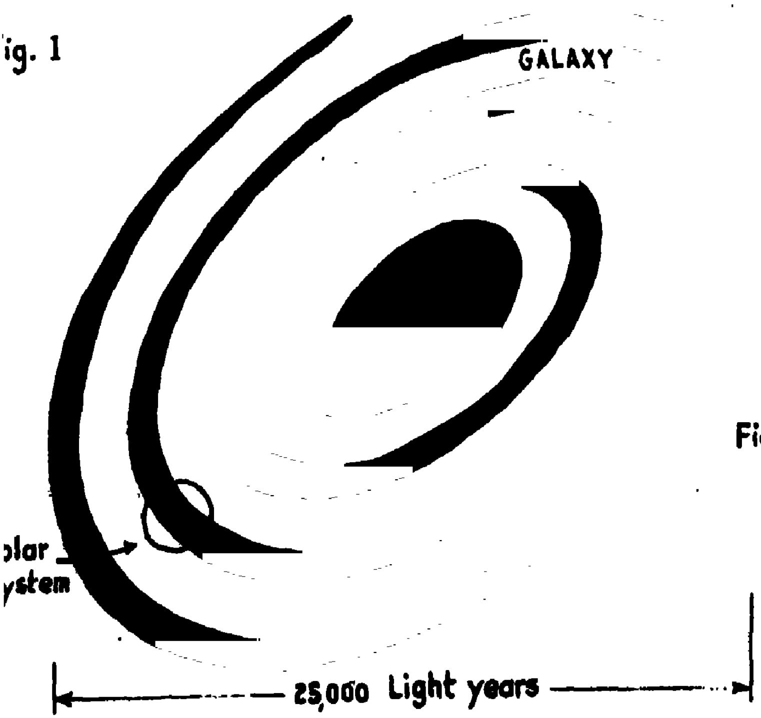


Fig.

SECTION—6. THE DYNAMICS OF SOCIAL CHANGE—A MODEL

There is an obvious parallelism between a assembly of human-beings and a collection of molecules in statistical equilibrium -at any given temperature the molecules move to and fro, and collide with each other, thereby changing each other's motion and directions. In much the same fashion human-beings in any given assembly interact, push, and press on each other, and the nett behaviour of the whole assembly is to a great extent related to these individual interf-actions and pushes. These collisions and pushes between molecules are essentially in the nature of disorder forces, and have been very much in evidence in natural phenomena. Men have noticed the general tendency towards dis-order or randomness of motions or action. In fact, the study of the conversion of thermal energy into work; as in the case of the steam-engine or the motor-car engine, brought these ideas into sharp focus, and the results of scientific experiments were generalised into the second law of thermodynamics, *viz.*

$$\Delta S \geq 0$$

This law states that the Entrophy (S) or un-available energy increases in the processes that occur *spontaneously* in nature. Since Entropy is a measure of degree of dis-order, this implies that dis-order on its own tends to increase in the universe. Entropy is defined mathematically as $S = k \ln W$, and experimentally by $\Delta S = \Delta Q/T$. When applied to a social system or assembly of human-beings, this result would imply three things ;

(i) "Randomness" or disorder is associated with useless or wasteful activity.

(ii) Entropy measures the magnitude of this "Randomness" and tends to increase under ordinary circumstances.

(iii) To produce any form of orderliness requires a definite external effort which must be suitably applied and sustained.

For applying these principles to social systems, we may consider a couple of typical applications of these to physical systems. A liquid (or solid) whose molecules are susceptible to magnetic influences consists of molecular magnets that are oriented at randomn in various directions, so tha. the nett magnatization is zero. When a magnetic field is applied to such a liquid (or solid) this randomness is charged into a condition where more molecular magnets are directed along the applied field and fewer against it thus, giving a nett magnatization of the liquid (or solid) which increases as the outside field increases. An interesting thing happens in a solid where the individual molecular magnets interact strongly with each other so as to produce what can be called an internal field. For this case the Weiss-Langevan theory has a model consisting of strongly magnetic domains, which can actually reverse their direction of magnetization, and leads to the curve for change of magnatization with increasing temperature

(or disordering energy) shown in Fig. 2. Thus the external magnetic or "orienting" field is able to produce an appreciable effect only when the disordering forces are below a certain critical level.

A model that is perhaps somewhat nearer to the interactions in a group of human beings is that of the Bragg-Williams or the Boethe theory for order disorder transformations in alloys like the brasses, which have a highly ordered "superlattice" structure below a certain temperature. In a fully ordered alloy, there are great distances within a crystal through which there is a perfect arrangement of A atoms on one set of lattice points and B atoms on another set. The ordering is constant or "in step" through long distances. The degree of "long-distance" orders is the fraction of the atoms that are in their right positions minus the fraction that are in wrong positions, and may be defined as to degree by a fraction, S, which varies from zero at complete disorder up to unity at complete order.

In an alloy of 'A B' atoms, the energy of the crystals will be a minimum when order is complete and will be increased an amount, say V, if a pair of atoms is interchanged so that an A atom takes a place that should be occupied by a B atom, and a B atom moves to a position that should be occupied by an A atom. In other words, V is the nett amount of work required to effect this interchange. Under thermal agitation, an equilibrium will be reached (such that the ratio of the number of atoms in the right positions to the number in wrong positions is equal to Boltzmann's factor $e^{-V/kt}$, where k in Boltzmann's constant, and T is the absolute temperature).

If V were a constant, say V o, independent of the degree of order in the alloy, there would be a gradual increase in disorder with rising temperature along a curve plotted in Fig. 3 (a) as a dashed line. In actual fact, a *decrease in order results in a decrease in the forces that tend to maintain order. The distinction between right and wrong positions for an atom, in fact, vanishes when disorder is complete*, and the energy V to effect an interchange then drops to zero. This dependence of V on order is responsible for the *decrease of order at an accelerating rate* as the temperature is raised ; as Bragg puts it, *demoralization sets in*, and there is a complete collapse of the ordered state. The theoretical calculation of the degree of order in equilibrium at each temperature, assuming that V is proportional to the degree of order, S, gives the full-line curve of Fig. 3(a). The really interesting feature of this order disorder process for sociology is the existence of "short-range" order between nearest neighbours which continues well above the critical temperature. The variation of this "short-range" order is indicated by the dotted line in Fig. 3(b), and this could provides a first approximate model of the motivational process for a collection of individuals. The relation between "long-distance" order and "short-range" order is of particular interest, because the latter refers to the interactions between the (8 or 10) nearest neighbours, while the long-distance order covers the whole crystalline system that may extend over thousands or millions of atoms, depending on the dimensions of the fully ordered

Fig.3

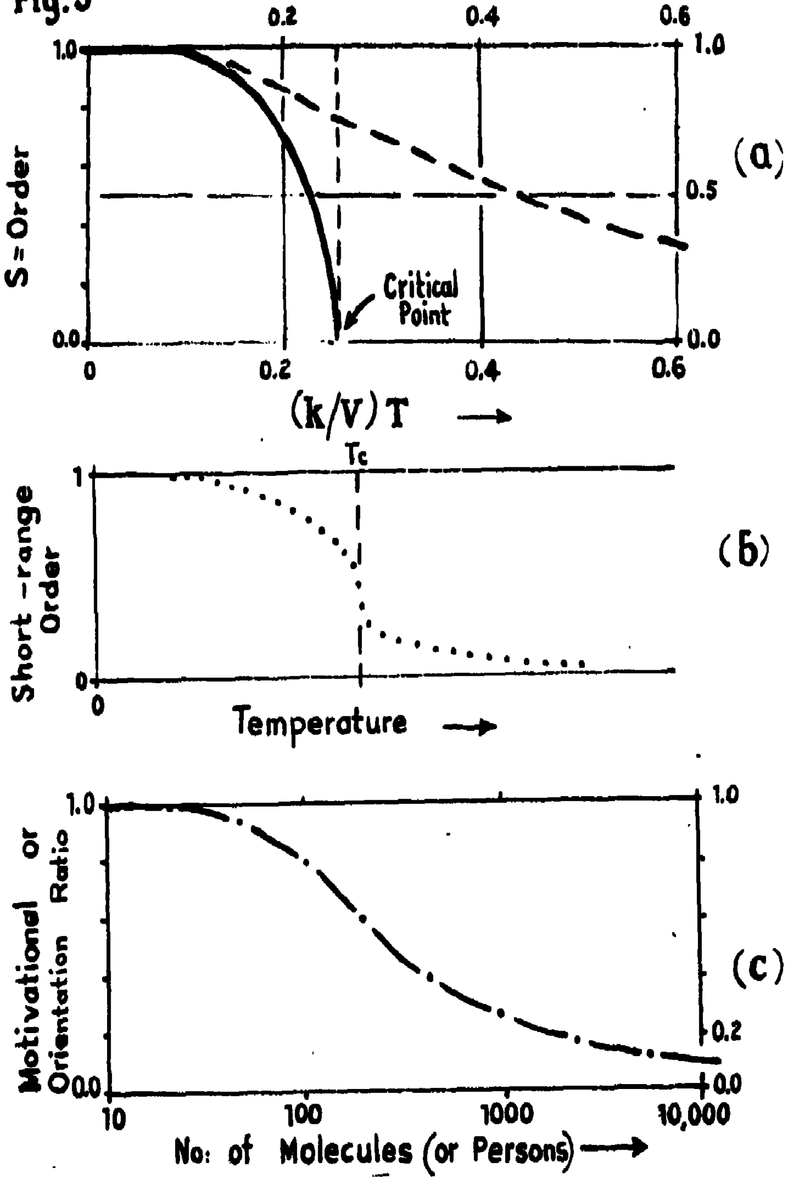

0.2
0.4
0.6
1.0
1.0
0.5
0.0
0.0
S = Order
(a)
Critical Point
0
0.2
0.4
0.6
(k/V) T →
Tc
1
0
0
Short - range Order
(b)
Temperature →
1.0
1.0
0.2
0.0
0.0
Motivational or Orientation Ratio
(c)
10
100
1000
10,000
No: of Molecules (or Persons) →

Fig. 3

domains or crystallites. The ratio of "long-distance" order to "short-range" order should be a measure of the effectiveness of the orienting or motivational forces in the case of systems of human beings. A shematic plot of the variations of this ratio with number of molecules (or human beings) is shown in Fig. 3(c). Studies on estimating this "motivational ratio" from certain observed data are in progress and constitute an important step towards understanding the processes underlying such social changes under the influence of Islamic motivation.

SECTION—7. CONCLUDING THOUGHTS

Islam is in principle opposed to dogmatism and mental subservience to pre-concieved notions. Islamic belief is a dynamic motivating force that not only keeps pace with the changing times but, by liberating man's creative energies, sets the trend for future course of development. The forces of 'tauheed' and the divine guidance provided through the Quran and Sunnah are in fact the guiding and motivating forces, which will control the course of evolution of the Muslim Ummah on the right path. To quote from a recent address by Khurshid Ahmad at the Lisbon symposium on "The Changing World Order : Challenge to Our Faiths":

> "Islam is a movement for social change. It not only gives a clear concept of society and the modus vivendi of bringing about the coveted change in history, but it also gives clear guidelines for socio-economic policy, for some of the key institutions that guarantee the implementation of that policy, and an organized social effort under disciplined leadership to see that these objectives are achieved in space and time."

But these changes will require time and careful guidance. The fact that major education and training programmes require at least a 6 year period for their introduction and another 6 years for their viable and productive continuation has led some authors (for example Zahlan[13]) to maintain that 12 years is the basic period for bringing about any major socio-economic change. This is substantiated by the duration of the preaching of the Prophet ﷺ in Mecca & Medina and the existence of 12 and 25-years periods for socio-economic change in the case of many countries in the world today. We must therefore lay down long-term plans with this as a minimum time-span for the first phase of the re-construction of Islamic thought and freeing it from the dead-weight of *un-necessary philosophy*, while bringing the experimental method and the importance of observational data into a place of leading importance for the study of natural as well as sociological phenomena. To quote from the Quran (Surah Al Momin, verse 82) افلم يسيروا فى الارض فينظروا كيف كان عاقبة الذين من قبلهم ط

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AL-GABR WA'L-MUQUABALOH OF AL-KHUWARZMI

1. Life and Works :

Abu Jafar also (Abu Abdullah) (9) Muhammad Ibn Musa Al Khuwarzmi was the first to organize and develop Algebra as a separate mathematical science. Not much is known of his life. Only a few details are available from brief notices in Islamic bibliographies and casual remarks by Muslim historians and geographers. He was born before 800 AD and died between 835 and 847. The name suggests that he came from Khuwarzmi, but the historian Al Tabari gives him the additional epithet " Al Qutrubbuli " indicating that he came from Al-Qutrubbul a district near Baghdad. It appears his ancestors and not he came from Khuwarzmi (7).

Al Khuwarzmi was one of those outstanding scientists whom the Caliph Al-Mamun (reigned 813—833) had gathered in ' Beyt-al-hikma ' House of wisdom) an academy of scientists set up at Baghdad probably by Haroon-al-Rashid.

Al-Khuwarzmi was a versatile genius and made remarkable contributions in history, geography, astronomy and mathematics. His works have been listed by Ibn-Al-Nadim (2), Ibn-al-Qifti (3) and Said-al-Andulusi (4). His major works are given below :—

History.—' Kitab-al-Tarikh '.

Geography.—' Surat-al-Ard '. This also contains a celestial atlas.

Astronomy.—Zij-as-Sind hind '———" the first Arabic astronomical work to survive in anything like entirety ". Al-Khuwarzmi first abridged Muhammad bin Ibrahim Al Fazari's Zij-as-Sind hind Kabir ' a translation of Sidhanta. This was followed by two enlarged versions containing material based on observations taken by himself. Zij means a set of astronomical tables. In his ' Zij ' Al Khuwarzmi also gave an expporition of certain concepts of astronomy. According to Ibn Abi-Udaiyeyah, the ' Zij ' Al Khuwarzmi was revised and enlarged by Meslama al Majriti (about 1000 AD). His version also included tables of trigonometric functions and the world ' Jib ' occurring in these tables appears to be Al Majritis ' innovation. These tables were further revised by his pupil Ibn-al-Saffar (d. 1035). The Toledan translation is a collection of tables of Al-Khuwarzmi, Al Battani and Al Zargali, translated probably by Gerard of Cremona in late 12th century. These tables gained immense popularity in Europe and remained in vogue for more than hundred years.

Sundial.—' Kitab-ul-rukhama '.

Astrolable.—' Kitab-al-ami-bil-astarlab '.

' Kitab ami-al-astarlab '.

Arithmetic.—' Al Jama ' wa'l tafriq bi hisab-al-hind '. The Toledan translation done about 1120 A.D. bore the title "Algorismi de numero indorum'.

This book was taught as text for a number of centuries in Europe. The opening words of this book "Al Khuwarzmi says" were latinized as "Dixit Algorismi" and his name was thus made synonymous with the art of computation, giving rise to 'guarisho' in spanish and 'augrism' changed to 'algorithm' in English. This term has now regained wider usage with the advent of computer Al Khuwarzmi's treatise on arithmetic was a great success not only in muslim countries but also in Europe which remained under its influence for a number of centuries. Its main contribution is the introduction of decimal place value system which revolutionized mathematical thinking. There were many adaptations and off shoots of this remarkable work. Some of these are: 'Liber Alghoarismi' of John Seville (Ca 1135), 'Alograismus' of Socrobosco (Ca 1250). 'Liber Ysagogarum Alchorizmi' (12th century).

Algebra.—Kitab Al Gabr wa'l Muquabalah '.

This work continued as text and was praised highly for a number of centuries. It was twice translated into Latin in the 12th Century separately by Robert of Chester and Gerard of Cremona, introducing in this way "into Europe a science completely unknown till then and with it a terminology which was still capable of growth but already completely developed" (8).

Arabic text with English translation by Rosen was published from London in 1831 under the title "Algebra of Muhammad ben Musa". It was reprinted from New York in 1969. The editing is poor and the translation is carelessly done.

A better text has been edited by Ali Mustafa Musharrafa and Muhammad Mursi Ahmad (1939) Cairo Publication of Faculty of Sciences No. 2. This text and the text with Rosen's translation are both based on the manuscript with the Oxford Bodleian Library. Another manuscript is also reported to exist.

Toomer (7) has given the chronological order in which the works of Al Khuwarzmi appeared. The works on Algebra and astronomy appeared during Al-Mamun's reign in the early part of Al Khuwarzmis career. The book on Algebra which was dedicated to Al-Mamun preceded the book on arithmetic.

2. 'Kitab' al Gabar Wa'l Mugnabalah'

Al Khuwarzmi begins the book in the traditional style by offering praise to Allah and paying homage to the Holy Prophet. This very fact refutes Al-Tabari's conjecture that Al Khuwarzmi was an 'al-majusi' (Zorastarian) (7). The starting sentence of the text "This work was written by Muhammad Ben Musa of Khuwarzm He commences it thus.........." was used by some later authors to give an air of anthenticity to their works.

Al Khuwarzmi lays down the object of Algebra as providing "what is easiest and most useful in arithmetic such as men constantly require in cases of inheritance, legacies, partition, lawsuits and trade and in all their dealings with one another or where the measuring of lands, the digging of canals, geometrical computations and other objects of various sorts and kinds are concerned".

His book is divided into three parts. The first part deals with Algebra, the Second part is concerned with mensuration and the third and the longest one is devoted to problems arising out of legacies.

3. **Algebra : Basic Concepts**

Originally Algebra was mainly concerned with the solution of equations. "When I concerned what people generally want in calculating. I found that it always is a number".

To appreciate Algebra of al Khuwarzmi we must remember that :

(*i*) his algebra is rhetorical.

(*ii*) the two sides of an equation are dealt with separately.

(*iii*) the number system was restricted, complex numbers were not introduced and even Zero and negative numbers were not popular.

Al Khuwarzmi introduced two concepts——— 'gabr' and 'muquabalah'. The term 'algabr' means restoration by transposing negative quantities to the other side of the equation to make them positive. To quote as an example from him, the equation.

$$X^2 = 40X - 4X^2$$

is by the process of 'gabr' transformed to

$$5X^2 = 40X$$

The term 'al muquabalah' refers to the process of balancing by reducing positive quantities of same powers on both sides of the equation.

Thus

$$50 + X^2 = 29 + 10X$$

is by al muquabalah reduced to

$$21 + X^2 = 10X$$

The basic notions introduced are still used and restoration and balancing are common practices known to every school boy. The term 'al gabr' have the name 'algebra' to the science itself. Canacci (14th century) was the first to use 'algebra' in this sense. The other term 'al muquabalah' could not gain popularity. The basic elements of an equation in the words of Al Khuwarzmi are

"I also observed that the numbers which are required in calculating by Restoration and Balancing are of three kinds, namely roots, squares and simple numbers relative to neither root nor square."

A root is any quantity which is to be multiphied by an integer or a fraction.

A square is the whole amount of the root multiplied by itself.

A simple number is any number which may be pronounced without reference to root or square.

Al Khayyam built his algebra on the foundations laid down by Al Khuwarzmi (1). He says, " Algebra deals with Simple numbers and quantities and one of its main functions is to describe relations between known and unknown numbers by means of which the unknowns are determined. Al Khuwarzmi's algebra mainly deals with numerical and geometrical solution of equations ".

Al Khuwarzmi did not go beyond the quadratic equation and accordingly he recognizes three types of quantities.

The simple power of the unknown quantity (shay).

The square of the unknown quantity (mal).

The constant, a quantity not involving the unknown.

It may be noted that the unknown quantity was called by muslim mathematicians ' shay ' (thing) or ' jazar ' (origin or base or root). In medieval mathematics ' shay ' was translated as ' cossa ' and ' mal ' as ' census '. The term root of an equation as used even today is direct translation of ' Jazar '.

4. Classification and Solution of Equations

Both sides of the equation were to be dealth with separately. As a prerequisite for comparing the two sides with a view to determining the value or values of the unknown, Al Khuwarzmi divided the equation into two broader classes

(i) Two-term equations (Al Mufarridat).

These are further divided into three classes " A number belonging to one of these three classes may be equal to a number of another class ; you may say for instance ' squares and equal to roots ' or ' squares are equal to numbers ' or ' roots are equal to numbers '.

Symbolically

$ax^2 = bx$

$ax^2 = c$

$bx = c, \quad a, b, c \; 70.$

The examples quoted by him are :—

" A square is equal to five roots of the same ". The root of the square is five and the square is twenty five, which is equal to five times its root. That is to say the equation involved is $x^2 = 5x$ giving. $x = 5$ (no recognition is given to the other root).

" One third of the square is equal to four roots then the whole square is equal to twelve roots that is a hundred and forty four and its root is twelve.

The equation is $\frac{1}{3}x^2 = 4x$, giving $x = 12$ ignoring $x = 0$

" Five squares are equal to ten roots, " then one square is equal to two roots, the root of the square is two and its square is four ".

$$5x^2 = 10x \text{ so that } x = 2$$

" In this manner whether the squares be many or few (*i.e.* multiplied or divided by any number) they are reduced to a single square ; and the same is done with the roots which are their equivalents ; that is to say they are reduced in the same proportion as the squares ".

The examples given of the second type, stated in symbols are :

$x^2 = 9$, $5x^2 = 80$, $\frac{x^2}{2} = 18$, the negative roots ignored in the solution.

" Thus all squares multiples and submultiples of them are reduced to a single square. If these be only part of a square you add thereto until there is a whole square ; you do the same with the equivalent in numbers ".

The examples quoted for the third type are :

$$x = 3, \; 4x = 20, \; x/2 = 10.$$

(ii) Three term Equation (Al-Muqutarinat).

These are again subdivided into three types "I found that these three kinds ; namely *roots, squares* and *numbers may be combined together and thus* three compound species arise, that is ' squares and roots equal to numbers, '

' squares and numbers equal to roots '

' roots and numbers equal to squares '

Symbolically these are :

$$ax^2 + bx = c$$

$$ax^2 + c = bx$$

$$bx + c = ax^2, \; a, b, c > 0$$

The solution of each of these types is illustrated by examples and general rules are formulated. Consider the example.

" One square and ten roots of the same, amount to thrity nine dirhems. That is to say what must be the square which when increased by 10 of the own root amounts to thirty nine ? The solution is this you halve the number of the roots, which in this present instance yields five. This you multiply by itself, the product is twenty five. Add this to thirty nine ; sum is sixty four. Now take the root of this which is eight and subtract from it half the number of roots which is five the remainder is three. This is the root of the square which you sought for ; the square itself is nine ".

In symbols the equation desired to be solved is

$$x^2 + 10x = 39$$

and following the steps the solution is

$$x = \sqrt{\left\{\left(\frac{10}{2}\right)^2 + 39\right\}} - \frac{10}{2} = 3$$

About the general case $ax^2 + bx = c$, Al Khuwarzmi says " The solution is the same when two squares of three or more or less be specified, you reduce them to one square and in the same proportion you reduce also the roots and simple numbers which are connected therewith ".

Thus $\quad ax^2 + bx = c.$

is first reduced to

$$x^2 + \frac{b}{a}x = \frac{c}{a}$$

and following the algorithm given above the solution is

$$x = \left\{\left(\frac{b}{2a}\right)^2 + \frac{c}{a}\right\} - \left(\frac{b}{2a}\right)$$

He illustrates this by two examples

$$2x^2 + 10x = 48 \text{ and } \frac{x^2}{2} + 5x = 28$$

The solution of the second type is illustrated by the example. " A square and twenty one in numbers are equal to ten roots of the same square. That is to say what must be the amount of a square which when twenty one dirhems are added to it becomes equal to the equivalent of ten roots of that square." Halve the number of the roots, the result is five. Mulliply this by itself, the product is twenty five. Subtract from this the twenty one which are connected with the square. The remainder is four. Extract its root, it is two ; subtract this from half the number of roots, the remainder is three. This is the root of the square and the square itself is nine, or you may add the root to half the number of roots, the sum is seven. This is the root of the square which you sought for and the square itself is forty nine".

" When you meet with an instance which refers you to this case try its solution by addition and if that does not serve, their subtraction certainly will. For in this case both addition and subtraction may be employed which will not answer in any other of the three cases, in which the number of roots must be halved."

The equation involved is

$$x^2 + 21 = 10x$$

and following the algorithm the solution is

$$x = \frac{10}{2} \sqrt{\left\{\left(\frac{10}{2}\right)^2 - 21\right\}} \text{ or } x = \frac{10}{2} + \sqrt{\left\{\left(\frac{10}{2}\right)^2 - 21\right\}}$$

When the coefficient of x^2 is not unity the equation may be reduced to that form. Thus

$$ax^2 + c = bx$$

is reduced to $x^2 + \frac{c}{a} = \frac{bx}{a}$

and its solution is $x = \frac{b}{2a} - \sqrt{\left\{\left(\frac{b}{2a}\right)^2 - \frac{c}{a}\right\}}$ or $x = \frac{b}{2a} + \sqrt{\left\{\left(\frac{b}{2a}\right)^2 - \frac{c}{a}\right\}}$

The solution of the third type is illustrated by this example :

" Three roots and four of simple numbers are equal to a square.

The solution is : Halve the roots, the result is one and a half. Multip this by itself ; the product is two and a quarter Add this to the four, the sum is six and a quarter. Extract its root ; it is two and a half. Add this to half the number of roots which was one and a half and the sum is four. This is the root of the square and the square is sixteen.

Whenever you meet with a multiple or submultiple of a square. reduce it to one entire square "

The equation indicated is

$$3x + 4 = x^2$$

The solution offered is $x = \sqrt{\left\{\left(\frac{3}{2}\right)^2 + 4\right\}} + \frac{3}{2} = 4$

The solution of $bx + c = ax^2$

reduced to $\frac{b}{a}x + \frac{c}{a} = x^2$

is $x = \sqrt{\left\{\left(\frac{b}{2a}\right)^2 + \frac{c}{a}\right\}} + \left(\frac{b}{2a}\right)$

5. Appreciation of the Methods

The ingenuity of Al Khuwarzmi's method is remarkably manifested in his recognizing two solutions of a quadratic. The equation belonging to the first type *viz*

$$ax^2 + bx - c = 0, \quad a, b, c > 0$$

has always real roots one positive and one negative. Being concerned with positive roots only, Al Khuwarzmi recognizes only one solution here, admitting only positive sign of the radical. The second type

$$ax^2 - bx + c = 0 \quad a, b, c > 0$$

has both roots real and positive if $b^2 - 4\ ac/0$, a fact clearly stated by Al Khuwarzmi. He is also conscious of the 'impossibility' of the solution, when the equation has complex roots ($b^2 - 4\ ac/0$), and also of equality of two real roots ($b^2 - 4ac = o$) He says, " And know that when in a question belonging to this case you have halved the number of roots and multiplied it by itself, if the product be less than the number of dirhems connected with the square than the instance is impossible; but if the product be equal to the dirhems by themselves then the root of the square is equal to half the number of roots alone without either addition or subtraction ($x = b/2a$).

The third type

$ax^2 - bx - c = o$

has both the roots real, one positive and one negative, a fact recognized by Al Khuwarzmi who admits only the positive sign of the radical.

6. Applications

He has illustrated his rules by a number of worked examples. Some of these are :

" A square, multiply its root by four of its roots and product will be three times the square with a surplus of fifty dirhems " Computation : You multiply the root by four roots, it is four squares, which are equal to three squares and fifty dirhems. Remove three squares from the four ; there remains one square equal to fifty dirhems. One root of fifty multiplied by four roots of them is equal to three times the square and a residue of fifty dirhems.

' If the instance be : " A square which when added to twenty dirhems is equal to twelve of its roots," then the solution is this : You say one square and twenty dirhems are equal to twelve roots. Halve the roots and multiply them by themselves ; this gives thirty six. Subtract from this the twenty dirhems, extract the root from the remainder and subtract from half the number of roots which is six. The remainder is the root of the square ; it is two dirhems and it square is four.

In this example Al Khuwarzmi has missed the second positive root.

If the instance be " To find a square, of which if one third be added to three dirhems and the sum be subtracted from the square, the remainder multiplied by itself restores the square ;" then the computation is this : if you subtract one-third and three dirhems from the square there remain two-thirds of it less three dirhems. This is the root. Multiply therefore two-thirds of thing less three dirhems by itself. You say two-thirds by two-thirds is four-ninths of a square ; and less two-thirds by three dirhems is two roots ; and again two-thirds by three dirhems is two roots and less three dirhems by less three dirhems is nine dirhems. You have, therefore four-ninths of a square and nine dirhems less four roots which are equal to one root. Add the four roots to the one root then you have five roots which are equal to four ninths of a square and nine dirhems. Complete now your square that is multiply the four ninths of a square by two and a fourth

which gives one square ; multiply like wise the nine dirhems by two and a quarter this gives twenty and a quarter; finally multiply the five roots by two and a quarter ; this gives eleven roots and a quarter. You have, therefore, a square and twenty dirhems and a quarter equal to eleven roots and a quarter. Reduce this according to what I taught you about halving the roots.

7. **Mensuration** :

After giving worked examples, Al khuwarzmi gives a short section headed "On Business Transactions" in which he explains the rule of three. The next part deals with practical mensuration : rules for finding circumference of circle ; for determining areas of various plane figures, including circle : for finding volumes of a number of solids including cone, pyramid and truncated pyramid.

He gives three methods of finding circumference of a circle " In any circle the product of its diameter, multiplied by three and one-seventh will be equal to the circumference. This is the rule generally followed in practical life, though it is not quite exact. The geometricians have two other methods. One of them is, that you multiply the diameter by itself, then by ten and hereafter take the root of the product ; the root will be the circumference. The other method is used by the astronomers among them; it is this that you multiply the diameter by sixty two thousand eight hundred and thirty two and then divide the product by twenty thousand. the quotient is the circumference Both methods come very nearly to the same effect.

He has two methods for determining area of circle " The area of any circle will be found by multiplying half the circumference by half the diameter...... if you multiply the diameter of any circle by itself and subtract from the product one-seventh and half one-seventh of the same, then the remainder is equal to the area of the circle. This comes very nearly to the same result with the method given above."

He has also illustrated with examples applications to measurement of land One such example is " There is a triangular piece of land, two of its sides having ten yards each and the base twelve; what must be the length of the side of a square inscribed in such a striangle".

8. **Legacies** :

The third and the longest part consists exclusively of solved problems on legacies. An appreciation of this requires sufficient Knowledge of Islamic laws of inheritence. Two of the problems discussed are given below:

" If he leaves two sons and a daughter and bequeaths to some one as much as would be the share of a third son, if had one ; then you must consider what would be the share of each son, in case he had three. Assume this to be seven and for the entire heritage take a number, one-fifth of which may be divided into fifths. Such a number is thirty-five. Add to it two-sevenths of the same namely ten; each son fourteen and the daughter seven".

" If he leave a mother, three sons and a daughter and bequeaths to some one as much as the share of one of his sons less the amount of the share of a second daughter, in case he had one ; then you distribute the heritage into such a number of parts as may be divided among the actual heirs and among the same if a second daughter were added to them. Such a number is three hundred and thirty six. The share of the second daughter if there were one, would be thirty five and that of a son eighty ; their difference is forty five and this is the legacy. Add to it three hundred and thirty six, the sum is three hundred and eighty one which is the number of parts of the entire heritage.

9. **Critique** :

The Western authors have not been fair and just in their comments about Al Khuwarzmi's works which they regard as mediocre and lacking in originality. Their criticism is harsh, bitter and malicious. The main points of their attack are :

(1) Al Khuwarzmi's algebra is rhetorical and he has failed to use symbols. Diophantus is said to have used symbols, but there is no evidence of any Greek or Hindu or Muslim mathematician using symbols during the period of about 1000 years between Diophantus and Al Khuwarzmi. Even if we look ahead of him no trace of the use of symbols is found for centuries " Arabs were first to realise the case with which mathematical problems can be represented in terms of symbols referring to the unknown quantity, its square and its cube. Symbols seen to have first appeared in the works of Al-Qalsadi (1412—1486) " [6]. In Europe Francois Vie'te (1540—1603) was the first to use Symbols in his. " Arten Analytican. Isagoge". (Tours 1591).

(2) Although It is acknowledged that Al Khuwarzmi's book on algebra is the first known written book on that subject in Arabic, his work is not held as original. It is claimed that there hangs a controversy over the source of his work. Some authors believe that the source lies in Hindu mathematics and in support of their view they say that Al Khuwarzmi made use of Hindu astronomy, his work is rhetorical, he has described rule of three, and the formulas given in his mensuration are used by the Hindus. A distinguishing characteristic of Muslim Scientist is the honesty with which they acknowledge the source of their information. The very title of Al Khuwarzmi's book on arithmetic speaks of this fact. Had he derived his knowledge of algebra from Hindu sources he would have mentioned the fact. As a matter of fact, Hindu algebra had not been introduced to the Muslims during Al Khuwarzmi's days. It is important to note the chronological order of the composition of his works on algebra and arithmetic.

(3) Some authors say that Al Khuwarzmi borrowed his ideas from the Greeks, for his introductory exposition of equations is geometrical after Euclid. Geometrical method has been used just to illustrate his

ideas, the principal approach is analytical. It is very doubtful that he had any access to Diophantus. Ibn Al Nadim reports that the first ever work of Diophantus to appear in Arabic was a commentary on Three and One Half Books of Diophantus by Qusta ibn Luqa (ca 900) Abul Wafa (940—988) was the first to write A Commentary on Diophantus' Algebra.

(3) It is claimed that Al Khuwarzmi's portion on mensuration is based on the Jewish work " Mishnat ha Middat " the date of composition of which is quite controversial Gandz places it round 150 AD. Its pre-Al Khuwarzmi origin is mostly based on such conjectures as linguistic considerations. The possibility cannot be denied of this book having been written after Al Kuwarzmi in which case it may be an adaptation of Al Kuwarzmi's work.

(4) Some very fantastic theories have been advanced in order to deprive Al Kuwarzmi of the glory won by him through the association of his name to a widely used term and the association of the name of his work to an important mathematical science. Gandz regards 'gabr' as coming from assyrians ' gabru ' Bruins claims that assyrians knew of the six model equations of Al Khuwarzmi. The word 'gabru' is not found in any intermediary language such as Greek and one wonders how it could have survived in Aramaic till Al Khuwarzmi. It is very doubtful whether Al Khuwarzmi knew anything of Assyrian mathematics. Still funnier is the view that the word 'Alogrithm' is dervied from Algor the name of a hypothetical king or philosopher. The same is true of the conjecture that algorithm is a hybrid of arabic 'al' and greek 'arithmos'.

10 Conclusions :

All attempts to belittle the achievements of Al Khuwarzmi will prove futile. His work on Algebra enjoys a unique and prominent place in the history of mathematics. It marks the emergence of Algebra as a separate mathematical science, which continued to develop for centuries on the lines laid down by Al Khuwarzmi. This book was held in high esteem by muslim mathematicians and later it held Europe under its spell for hundreds of years. It is still readable . One wonders at the ingenuity and skill of exposing the methods of classifying and solving equations, recognizing distinct, equal, negative roots.

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